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FATS AND OILS Situation

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U. S. DEPARTMENT OF AGRICULTURE

Table 1.--U.S. Fats and Oils Situation at a Glance

Item	Unit	Marketing year total or average		1971		1972			
		1969-70	1970-71 preliminary	July	August	May	June	July	August
SOYBEANS (Year beg. Sept.)									
U.S. average price received by farmers	$ bu.	2.35	2.85	3.18	3.09	3.35	3.32	3.34	3.36
U.S. support price	$ bu.	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Price, No. 1 yellow, Illinois points	$ bu.	2.53	3.00	3.30	3.23	3.47	3.44	3.48	3.45
Price, No. 2 yellow, f.o.b., Gulf	$ bu.	2.74	3.19	3.51	3.40	3.68	3.63	3.69	3.69
Price, No. 2 yellow, f.o.b., Baltimore	$ bu.	2.76	3.21	3.51	3.40	3.70	3.65	3.68	3.71
Receipts at mills	Mil. bu.	742.6	769.0	42.5	34.4	46.1	50.3	34.7	30.0
Crushings	Mil. bu.	737.3	760.1	62.4	63.6	63.0	57.1	58.2	59.0
Oil yield per bushel crushed	Lb.	10.65	10.83	10.82	10.88	11.09	11.13	11.15	11.16
Meal yield per bushel crushed	Lb.	47.35	47.37	47.26	47.82	47.25	47.39	47.56	48.31
Stocks at mills, end of month	Mil. bu.	33.4	42.3	71.6	42.3	97.7	90.9	67.4	38.4
Exports	Mil. bu.	432.6	433.8	34.4	31.3	31.7	31.1	26.3	24.2
SOYBEAN OIL (Year beg. Oct.)									
Production	Mil. lb.	7,904.4	8,264.7	674.9	692.2	698.8	635.4	648.6	658.1
Domestic disappearance	Mil. lb.	6,327.6	6,253.2	442.1	524.6	605.0	480.4	502.4	N.A.
Exports	Mil. lb.	1,419.7	1,742.3	202.3	92.4	94.8	267.5	110.6	63.5
Stocks, end of month	Mil. lb.	543.4	772.6	745.3	819.2	945.0	829.7	860.1	N.A.
Price, crude, Decatur	¢ lb.	11.2	12.8	14.5	14.5	11.4	10.7	10.3	10.1
SOYBEAN MEAL (Year beg. Oct.)									
Production	Thou. ton	17,596.5	18,035.2	1,474.3	1,520.6	1,488.6	1,353.1	1,383.7	1,424.9
Domestic disappearance	Thou. ton	13,514.2	13,406.0	1,011.5	1,170.5	1,151.8	1,121.0	1,003.8	1,229.8
Exports	Thou. ton	4,035.4	4,559.3	406.6	349.7	365.4	221.0	324.1	204.8
Stocks at mills, end of month	Thou. ton	137.0	145.8	215.0	215.4	186.7	189.1	243.2	227.0
Price, 44% protein, bulk, Decatur	$ ton	78.40	78.50	84.25	78.75	95.30	95.00	101.40	101.0
Price, 49-50% protein, bulk, Decatur	$ ton	86.60	84.30	90.00	84.20	103.30	104.90	111.60	111.00
COTTONSEED (Year beg. Aug.)									
U.S. average price received by farmers	$ ton	41.10	56.40	---	60.00	---	---	---	45.00
U.S. support price, basis grade	$ ton	37.00	37.00	37.00	1/	1/	1/	1/	1/
Receipts at mills	Thou. ton	3,846.3	3,865.9	50.1	43.2	11.9	---	19.3	145.6
Crushings	Thou. ton	3,925.2	3,728.5	133.7	139.1	298.0	228.4	169.3	195.8
Stocks at mills, end of month	Thou. ton	80.4	217.8	217.8	121.8	613.8	385.0	235.0	184.7
COTTONSEED OIL (Year beg. Aug.)									
Production	Mil. lb.	1,281.9	1,210.9	43.5	47.0	97.7	75.8	54.4	61.7
Domestic disappearance	Mil. lb.	1,068.9	898.6	31.0	56.9	95.9	52.0	55.4	N.A.
Exports	Mil. lb.	437.5	357.4	69.8	14.3	30.6	50.0	33.5	58.3
Stocks, end of month	Mil. lb.	213.9	167.2	167.2	142.9	266.0	239.7	205.0	N.A.
Price, crude, Valley	¢ lb.	12.0	14.7	16.2	16.5	12.4	11.9	11.3	11.1
COMMERCIAL LARD (Year beg. Oct.)									
Production	Mil. lb.	1,810.4	2,018.0	142.0	150.0	146.1	137.0	107.0	126.0
Domestic disappearance	Mil. lb.	1,401.7	1,619.0	135.9	141.5	119.8	125.2	113.0	N.A.
Exports	Mil. lb.	349.3	329.4	10.6	15.8	11.6	12.6	12.7	5.4
Shipments to U.S. Territories	Mil. lb.	55.3	52.7	7.6	.3	5.8	5.8	.3	.3
Stocks, end of month	Mil. lb.	59.8	76.9	89.1	81.6	89.6	83.2	64.3	N.A.
Price, loose, tanks, Chicago	¢ lb.	11.6	11.1	11.3	12.0	10.4	10.3	10.0	10.0
CREAMERY BUTTER (Year beg. Oct.)									
Production	Mil. lb.	1,121.1	1,148.2	89.4	81.1	119.4	111.1	89.4	76.3
Domestic disappearance	Mil. lb.	1,099.0	1,072.5	66.5	82.1	89.8	74.3	72.0	N.A.
Stocks, end of month, total	Mil. lb.	171.3	222.0	251.2	246.8	159.1	194.8	211.4	194.7
Stocks, end of month, CCC	Mil. lb.	145.1	195.3	217.4	215.3	127.6	163.5	183.3	171.2
Price, 92-score, Chicago	¢ lb.	68.9	68.9	67.8	67.8	67.7	67.7	67.8	69.5
FLAXSEED (Year beg. July)									
U.S. average price received by farmers	$ bu.	2.65	2.40	2.34	2.34	2.49	2.50	2.49	2.55
U.S. support price, farm basis	$ bu.	2.75	2.50	2.50	2.50	2.50	2.50	2.50	2.50
Price, No. 1, Minneapolis	$ bu.	2.90	2.66	2.68	2.62	2.80	2.80	2.79	2.85
Receipts at mills	Thou. bu.	15,945	19,596	1,603	1,812	1,697	1,704	1,974	1,170
Crushings	Thou. bu.	14,448	18,946	1,264	1,679	1,585	1,966	1,660	2,016
Exports	Thou. bu.	5,731	3,331	---	4	303	1,105	1,040	919
Stocks at mills, end of month	Thou. bu.	2,743	3,396	3,735	3,868	3,007	2,688	3,003	2,157
LINSEED OIL (Year beg. July)									
Production	Mil. lb.	292.5	381.8	25.9	34.7	33.2	39.0	33.2	40.4
Domestic disappearance	Mil. lb.	251.7	253.8	28.9	50.6	22.9	26.2	18.1	N.A.
Exports	Mil. lb.	43.0	52.5	7.5	.1	15.6	11.4	28.4	30.8
Stocks, end of month	Mil. lb.	128.7	203.8	193.2	177.1	275.3	276.6	263.1	N.A.
Price, raw, Minneapolis	¢ lb.	11.9	9.7	8.8	8.8	8.8	9.5	9.5	9.5
INEDIBLE TALLOW & GREASE (Year beg. Oct.)									
Production	Mil. lb.	4,830.5	5,251.7	401.3	420.1	454.5	438.9	400.0	N.A.
Domestic disappearance	Mil. lb.	2,721.6	2,627.7	200.5	222.2	241.5	251.6	204.4	N.A.
Exports	Mil. lb.	2,048.6	2,589.9	161.6	215.0	229.1	182.4	206.6	191.4
Stocks, end of month	Mil. lb.	369.5	409.7	441.5	424.5	350.5	355.4	344.5	N.A.
Price, bleachable fancy, Chicago	¢ lb.	7.9	8.1	7.7	7.9	6.7	6.8	7.1	7.4
COCONUT OIL (Calendar year's 1970 and 1971)									
Production	Mil. lb.	247.1	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Imports	Mil. lb.	594.7	627.7	35.3	30.2	70.4	58.2	53.1	47.0
Domestic disappearance	Mil. lb.	788.9	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Stocks, end of month	Mil. lb.	100.8	103.9	147.4	124.8	170.2	168.5	157.7	N.A.
Price, crude, Pacific Coast	¢ lb.	16.3	13.6	14.2	14.2	10.1	9.7	9.4	9.3
PALM OIL (Calendar year's 1970 and 1971)									
Imports	Mil. lb.	140.9	216.9	5.6	12.1	24.7	58.3	84.6	30.8
Domestic disappearance	Mil. lb.	133.0	219.8	16.1	16.8	26.5	42.7	61.0	N.A.
Stocks, end of month	Mil. lb.	42.9	39.9	51.2	46.5	76.6	92.1	115.8	N.A.
Price, Congo, tanks, New York	¢ lb.	13.2	13.3	12.9	13.8	11.3	10.0	9.9	9.8
PEANUTS (Year beg. Aug.)									
U.S. average price received by farmers	¢ lb.	12.3	12.8	---	12.9	---	---	---	13.0
U.S. support price - Farmers' stock basis	¢ lb.	12.38	12.75	12.75	13.42	13.42	13.42	13.42	14.25
Millings, all types, Farmers' stock basis	Mil. lb.	2,267.9	2,615.9	42.9	52.0	190.1	132.9	45.6	78.1
Production of shelled edibles	Mil. lb.	1,284.8	1,373.1	7.0	29.2	87.0	58.1	15.0	41.8
Total edible uses - shelled basis	Mil. lb.	1,060.6	1,065.3	81.6	93.1	93.8	90.5	79.0	102.0
Crushings - shelled basis	Mil. lb.	437.1	600.9	48.2	34.6	56.4	45.3	37.4	40.6
Commercial stocks, end of month - FS	Mil. lb.	352.7	453.2	453.2	491.3	772.9	561.7	391.8	484.5
CCC stocks, end of month - FS	Mil. lb.	---	---	---	51.9	---	---	---	80.2
PEANUT OIL (Year beg. Aug.)									
Production	Mil. lb.	182.0	253.5	20.4	15.0	24.0	19.7	16.6	17.2
Domestic disappearance	Mil. lb.	154.5	193.1	17.9	11.6	18.5	16.9	13.9	N.A.
Exports	Mil. lb.	35.7	43.9	15.7	12.1	5.9	5.2	.1	4.9
Stocks, end of month	Mil. lb.	25.3	41.8	41.8	33.1	32.0	29.5	32.1	N.A.
Price, crude, Southeast mills	¢ lb.	14.9	17.1	18.5	18.5	18.0	17.2	17.8	16.4

1/ No support announced. 2/ Less than 50,000 pounds. N.A.--Not available.

FATS AND OILS SITUATION

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Approved by
The Outlook and Situation Board
and Summary released
September 26, 1972

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The *Fats and Oils Situation* is published in February, April, June, October and November.

SUMMARY

With prospective U.S. soybean supplies continuing tight, compared with expanding demand, producers are embarking on another banner marketing season. Their season average price probably will exceed the $3 per bushel for 1971-crop soybeans, possibly by 5 to 10%. This would be roughly $1 above the CCC loan rate of $2.25 per bushel. The 1971/72 marketing year price was the highest since 1947.

The supply estimate is 1,358 million bushels, 7% above 1971/72 but below the peak 1,450 million bushels 3 years ago. A 10% increase in the 1972 crop more than offsets reduced carryover stocks.

The 1972 soybean crop is estimated at a record 1,286 million bushels. Acreage harvested at 45.8 million is up 8%. Also, yield per acre on September 1 was placed at a record 28.1 bushels, half a bushel above 1971.

Soybean use has exceeded production in each of the past 3 marketing years, resulting in successive stock declines and price increases. Carryovers fell from 1969's record 324 million bushels to 72 million this September 1. Demand continues strong despite high prices, and with usage approximating 1.3 billion bushels, the carryover next September 1 will be near this year's low operating level.

Foreign demand for U.S. soybeans remains brisk. World requirements for protein are increasing rapidly and a reduction in fish meal availabilities is occurring. Soybean exports are expected to reach a new high, possibly by as much as a fifth above the 416 million bushels shipped in 1971/72. A new dimension in the export outlook this season is the Soviet's purchase of U.S. soybeans—an estimated 40 million bushels or about 1 million metric tons. Also, the entry of Great Britain into the EC and increases in foreign crushing capacity should enlarge the soybean export demand.

Because of the large prospective increase in the U.S. cottonseed crush and cottonseed oil availability, soybean crushings probably will not differ greatly from last season's 722 million bushels. Annual processing capacity has expanded to over 900 million bushels. With excess capacity, crushing margins may continue near the 10 cent level of the past season. The soybean crush this September, the first month of the new marketing year, is running a tenth below the 54½ million bushels in September 1971.

Demand for soybean meal continues strong, but soybean oil demand is relatively weak. Soybean meal prices (44% protein, Decatur) on September 25 were $106 per ton, $32 above a year ago. But soybean oil (crude, Decatur) at 9½ cents per pound was about 3 cents under September 1971. Meal supplies and use may increase slightly from last season. Oil supplies may be about unchanged. Domestic use could fall slightly and exports drop below last season's reduced total, due mainly to increasing supplies of U.S. cottonseed oil.

Cottonseed oil supplies for the current marketing year are estimated at 1.9 billion pounds, 0.5 billion pounds or 35% above 1971/72 and the largest since 1965. The 1972 cottonseed crop may be up 31%, and carryover stocks on August 1 (both seed and oil) were higher than last year.

Cottonseed oil prices probably will decline sharply in 1972/73 from last year's average of 13 cent per pound, making it more competitive with soybean oil. Cottonseed oil prices (crude, Valley) in late September are running 10 cents per pound, 5 cents below a year ago. Consequently, domestic use of cottonseed oil likely will increase perhaps to around 1 billion pounds compared with 0.8 billion in 1971/72. Many foreign countries still have a preference for cottonseed oil and U.S. prices will be attractive. Therefore, exports are projected to increase to over 0.6 billion pounds compared with 0.4 billion last season.

Cottonseed meal prices should be stronger than last year, reflecting a prospective world protein meal shortage which should more than counter-balance the increase in U.S. production. Cottonseed meal spot prices (41% protein, Memphis) in late September at $90 per ton are $20 above a year ago.

Prices received by farmers for 1972-crop cottonseed probably will average in the $40's, down from the $57 per ton received a year ago. While no CCC price support program for 1972-crop cottonseed has been announced, the Secretary of Agriculture has indicated that one could be introduced if needed. Under the most recent support program in 1970, cottonseed was supported at $37 per ton (basis 100 grade).

SITUATION AND OUTLOOK

Soybeans

Demand Hikes Prices

Spurred by the impact of strong demand on tight supplies, soybean farm prices rose steadily from a seasonal low of $2.84 per bushel last November to $3.37 in April. For the 1971/72 season, they averaged over $3 per bushel, more than 75 cents above support and the highest since 1947. Near season's end, prices strengthened as stocks were drawn down to minimum levels and speculation about and eventual confirmation of the sale of soybeans to the U.S.S.R., estimated at about 40 million bushels or approximately 1 million metric tons.

Total use was 1,196 million bushels, 5% below 1970/71 and the first decline in 8 years. However, this was about 2% more than the 1971 crop, making the third consecutive year that utilization exceeded output. Carryover stocks on September 1 totaled 72 million bushels, down from the 99 million a year ago.

During the season, farmers placed 168 million bushels of soybeans under the price support program, about 22 million more than in the previous year. By season's end, practically the entire volume had been redeemed, as farmers sold their beans at increasingly attractive prices. There is no reseal program for 1971-crop soybeans.

Crush and Margins Fall

The soybean crush normally increases each year and only occasionally declines. The 1971/72 decrease was, however, the largest on record—from 760 million to 722 million bushels. Limited soybean supplies were mainly responsible for restricting the crush. High prices, low processing margins, and reduced oil exports were additional factors. The industry operated at about 80% of capacity last year, near the long-term average.

Spot processing margins averaged 10 cent per bushel, down from 26 cent in 1971/72 but near the 1960-68 average of 12 cent. Still, they were the lowest since the 1964/65 season. Margins declined from 19 cent last October to zero in June, then climbed back to 13 cent in August. Record processing margins were set in 1946, when they averaged 54 cent per bushel for the season. During the 1969/70 season, they averaged 48 cent per bushel.

Supplies Limited Exports

Soybean exports in 1971/72 totaled 416 million bushels, about 4% below the level of the past 2 seasons, likewise reflecting the limited supplies. The dock strike at Eastern and Gulf Coast ports last winter disrupted the seasonal export movement but did not affect the season's total, since available supplies were fully utilized. The realignment of the U.S. dollar in relation to other currencies and the elimination of Japan's import tariff on soybeans helped keep U.S. beans competitive in world markets. Export volume to Western Europe—which accounted for about 55% of the total—was down slightly from the year before. Volume to Canada (mainly for transshipment) also was down. Exports to Japan—which accounted for one-fourth of the total—were up slightly.

Prices to Continue Strong

As the new season gets underway, soybean prices to farmers remain strong and likely will continue so.

Soybean crushings

Month	1968/69	1969/70	1970/71	1971/72
	Million bushels	*Million bushels*	*Million bushels*	*Million bushels*
September	38.2	47.5	53.3	54.5
October	54.7	61.8	66.8	59.5
November	55.6	62.0	65.9	59.8
December	52.2	63.1	68.1	64.0
January	49.9	62.9	67.7	63.9
February	45.0	58.8	60.1	60.2
March	54.6	62.9	63.6	63.9
April	50.4	62.5	63.8	58.5
May	54.5	67.4	63.8	63.0
June	50.6	63.7	61.1	57.1
July	52.1	62.7	62.4	58.2
August	48.2	62.0	63.6	59.0
Year	605.9	737.3	760.1	721.6

U.S. soybean exports[1]

Destination	Year beginning September			
	1968/69	1969/70	1970/71	1971/72
	Million bushels	*Million bushels*	*Million bushels*	*Million bushels*
Canada[2]	37.9	70.0	42.2	31.3
Mexico	.8	5.0	2.2	.1
Total North America[3] ..	38.7	75.4	44.8	34.0
Belgium	10.2	16.1	13.2	5.7
Denmark	11.8	18.4	21.4	16.2
France	.3	5.0	13.2	12.8
Germany, West .	30.5	41.8	53.0	52.0
Italy	16.4	25.4	26.0	22.6
Netherlands ...	40.7	57.4	57.9	64.1
Norway	4.2	5.4	7.5	7.3
Spain	31.2	36.3	38.7	44.0
United Kingdom	4.8	7.5	6.0	5.4
Total West Europe[3] ...	150.9	214.9	239.0	232.1
East Europe ...	1.8	5.9	6.1	2.4
Israel	6.5	8.3	12.8	12.2
Japan	69.9	101.4	102.8	106.7
Taiwan	16.6	21.2	19.6	23.9
Total Asia & Oceania[3] ..	93.7	134.1	139.7	145.7
Total exports[3] .	286.8	432.6	433.8	416.2
Value of exports:				
Per bushel (Dol.)	2.69	2.66	3.06	3.26
Total (Mil. dol.)	772	1,149	1,328	1,355

[1] Census data.

[2] Includes transshipments to Western Europe and Japan.

[3] Includes exports to other destinations not shown separately.

Soybean supplies will be a little larger but so will usage. Prices received by farmers during September, the first month of the new marketing year, averaged $3.26 per bushel—the highest of record for that month. The only other time that prices exceeded the $3 level in September was in 1947, when they were $3.05 per bushel. For the entire 1972/73 season, the average is expected to exceed the $3 received last year, possibly by 5 to 10%.

The 1972 soybean crop is being supported at a national average rate of $2.25 per bushel (No. 1 grade, 12.8-13.0% moisture), unchanged from the last 3 years. Farm and warehouse loans and CCC purchases are available from harvest through May 31, 1973, and will mature June 30, 1973. Loan activity may again be substantial as farmers utilize the loan for interim financing, but no CCC acquistions are anticipated.

Soybean supplies for the current marketing year total 1,358 million bushels, 7% above 1971/72 but below the record 1,450 million of 1969/70. The gain is due to increased acreage and yields. Carryover stocks on September 1 totaled 72 million bushels, down about 27 million from a year ago and the smallest in 6 years.

The 1972 soybean crop is estimated at a record 1,286 million bushels, 117 million or about 10% above 1971. Producers are harvesting 8% more acres and growing conditions have been favorable. Harvested acreage is 45.8 million acres, compared with 42.4 million last year. Yields per acre are a record high 28.1 bushels, half a bushel above 1971.

Utilization to Equal New Crop

Because of increased export demand, soybean use will likely match production, leaving carryover stocks next September about the same as this year's low level. Total use is expected to approximate 1.3 billion bushels, around 7% above last year.

Less than promising prospects for increased domestic use of soybean oil will tend to limit the crush. Also, there are larger soybean oil stocks, an increase of one-third in cottonseed oil supplies, continuation of small processing margins, lower edible oil prices, and a not too optimistic outlook for soybean oil exports. On the other hand, because of a likely reduction in world fish meal supplies and in spite of increased cottonseed meal availabilities, the demand for soybean meal probably will continue very strong with prices at high levels. For the entire year, the crush may not differ greatly from the 722 million bushels crushed in 1971/72.

The soybean export outlook is bright. The huge world demand for protein feedstuffs will keep soybeans moving at a record clip. Another new dimension in the 1972/73 export picture is the U.S.S.R.'s entry into the U.S. soybean market for an estimated 40 million bushels of soybeans. This action may have long-run implications; it emphasizes Russia's need for protein meals and the growing world dependence upon U.S. soybean meal. Also increases in foreign crushing capacity are expected to enlarge the soybean export demand. The entry of Great Britain into the EC will stimulate British soybean meal consumption as the high grain prices of the Community come into effect and encourage the utilization of cheap carbohydrate substitutes supplemented with high-protein ingredients. The larger U.S. supplies will permit soybean exports in 1972/73 to increase substantially from the 416 million bushels of last year, possibly by as much as a fifth.

SOYBEAN OIL

Prices and Use Off

Soybean oil prices (crude, Decatur) declined from 13 cents per pound in October 1971 to the recent level of 10 cents. For the entire season they averaged about 11 cents, 1½ cents below 1970/71. The drop reflects primarily the weakness in soybean oil exports, which were down sharply from the previous year.

Prices during the 1972/73 marketing year are expected to average below those of the past season. Soybean oil currently at 9½ cents per pound is about 3 cents under September 1971. A little smaller volume of soybean oil exports, increased cottonseed oil production, possibly larger palm oil imports, and possibly less domestic use of soybean oil are factors exerting downward pressure on prices.

Soybean oil supplies may approximate the 8.6-billion-pound level of last year.

Soybean oil supply and use

Item	1969/70	1970/71	1971/72[1]	1972/73[2]
	Billion pounds	*Billion pounds*	*Billion pounds*	*Billion pounds*
Beg. stocks, Oct. 1	0.4	0.5	0.8	0.8
Production	7.9	8.3	7.8	7.8
Total supply	8.3	8.8	8.6	8.6
Domestic use	6.3	6.3	6.4	6.3
Exports[3]	1.5	1.8	1.4	1.3
Total use	7.8	8.0	7.8	7.6
End. stocks, Sept. 30	0.5	0.8	0.8	1.0

[1] Preliminary. [2] Forecast based on September indications. [3] Includes shipments to U.S. Territories.

Domestic disappearance of soybean oil may fall a little below the record 6.4 billion pounds used in 1971/72, possibly near the 6.3-billion-pound level of 1969/70 and 1970/71. Major factors which will tend to dampen usage are larger cottonseed oil supplies, up a third from last year, possibly more lard and peanut oil available for domestic use, and possibly increasing imports of palm and coconut oils.

Oil Exports Off

During the 1971/72 marketing year just ended, soybean oil exports totaled 1.4 billion pounds, about a fifth below the previous year's record of nearly 1.8 billion pounds. Stiff competition from larger foreign oil supplies caused a decline in commercial sales. Exports under barter, CCC credits, and other dollar sales fell from nearly 1 billion pounds to around 0.6 billion. Exports under P.L. 480 programs totaled close to the previous year's level of 0.8 billion pounds. Exports under the donations program were up considerably, primarily due to increased volume to Bangladesh. The India-Pakistan-Bangladesh conflict hampered Title I exports to that region, which in recent years has been one of the largest recipients under these programs. Government programs accounted for over half of total oil exports last season.

Soybean oil exports during October-August 1971/72 totaled 1.3 billion pounds, 300 million pounds or a fifth below 1970/71. Exports were down to all major regions except Africa, which increased takings about a third. Larger exports went to Morocco and Tunisia. In the important Asia region, volume was down in India, Iran, West Pakistan and Bangladesh.

Table 2.--Soybeans: Acreage, production and price, by States and Areas, crop years, 1969-72

State and area	Acreage harvested				Yield per acre harvested				Production				Price per bushel received by farmers Season average			
	1969	1970	1971	1972 1/	1969	1970	1971	1972 2/	1969	1970	1971	1972 2/	1969	1970	1971	1972 3/
	-- 1,000 acres --				Bu.	Bu.	Bu.	Bu.	-- Mil. bu. --				Dol.	Dol.	Dol.	Dol.
North Carolina	885	867	936	1,095	26.5	24.0	24.0	25.0	23.5	20.8	22.5	27.4	2.37	2.90	2.85	3.24
South Carolina	959	988	1,047	1,125	22.5	20.5	21.5	22.0	21.6	20.3	22.5	24.8	2.37	2.89	2.88	----
Georgia	467	528	635	725	24.0	22.5	25.5	21.0	11.2	11.9	16.2	15.2	2.44	2.95	3.00	----
Alabama	641	609	662	708	23.0	23.5	26.5	24.0	14.7	14.3	17.5	17.0	2.31	2.82	2.90	3.20
Total Southeast	2,952	2,992	3,280	3,653	24.0	22.6	24.4	23.0	71.0	67.3	78.7	84.4	2.37	2.89	2.91	3.12
Kentucky	485	558	742	957	28.0	27.0	29.5	29.0	13.6	15.1	21.9	27.8	2.32	2.85	3.00	3.26
Tennessee	1,193	1,217	1,302	1,428	24.0	23.0	26.0	25.0	28.6	28.0	33.9	35.7	2.31	2.79	2.90	3.23
Mississippi	2,290	2,313	2,359	2,265	22.0	24.0	23.0	23.0	50.4	55.5	54.3	52.1	2.39	2.92	3.05	3.30
Arkansas	4,228	4,313	4,266	4,040	20.5	22.5	21.5	21.0	86.7	97.0	91.7	84.8	2.41	2.88	3.00	3.21
Louisiana	1,608	1,688	1,644	1,667	19.0	22.5	23.0	23.0	30.6	38.0	37.8	38.3	2.36	2.87	3.00	3.30
Total South Central	9,804	10,089	10,313	10,357	22.7	23.8	24.6	24.2	209.9	233.6	239.6	238.7	2.36	2.86	2.99	3.26
Ohio	2,344	2,414	2,494	2,893	29.0	28.5	30.5	29.0	68.0	68.8	76.1	83.9	2.36	2.84	3.05	3.30
Indiana	3,311	3,278	3,377	3,715	32.5	31.0	33.5	32.0	107.6	101.6	113.1	118.9	2.29	2.85	3.00	3.28
Illinois	6,730	6,800	7,150	7,508	33.5	31.0	33.0	34.0	225.5	210.8	236.0	255.3	2.38	2.90	3.05	3.29
Iowa	5,450	5,680	5,440	6,147	33.0	32.5	32.0	34.0	179.8	184.6	174.1	209.0	2.36	2.82	3.05	3.31
Missouri	3,150	3,465	3,605	4,000	26.0	25.5	27.0	27.0	81.9	88.4	97.3	108.0	2.32	2.84	3.00	3.20
Minnesota	3,068	3,099	2,851	3,191	24.5	26.5	23.0	25.0	75.2	82.1	65.6	79.8	2.37	2.79	3.00	3.24
Total Eastern Corn Belt	24,053	24,736	24,917	27,454	29.8	29.2	29.8	30.2	738.0	736.3	762.2	854.9	2.35	2.84	3.02	3.27
North Dakota	185	181	208	206	16.0	15.0	14.0	14.0	3.0	2.7	2.9	2.9	2.28	2.72	2.85	3.00
South Dakota	243	247	240	245	24.5	17.5	21.0	21.0	6.0	4.3	5.0	5.1	2.26	2.72	2.95	3.26
Nebraska	766	812	640	742	33.5	22.0	25.0	31.0	25.7	17.9	16.0	23.0	2.24	2.78	2.95	3.26
Kansas	852	1,005	871	930	23.0	15.0	20.5	24.0	19.6	15.1	17.9	22.3	2.22	2.74	2.90	3.15
Total Western Corn Belt	2,046	2,245	1,959	2,123	24.2	17.4	20.1	22.5	54.3	40.0	41.8	53.3	2.25	2.74	2.91	3.17
All others 4/	2,127	1,994	1,940	2,259	25.5	23.7	25.3	23.8	53.4	46.6	47.2	54.8	2.29	2.80	2.91	3.19
United States	40,982	42,056	42,409	45,846	27.5	26.7	27.6	28.1	1,126.3	1,123.7	1,169.4	1,286.0	2.35	2.85	3.01	3.26

1/ Preliminary. 2/ September 1 indications. 3/ September average. 4/ New York, New Jersey, Pennsylvania, Michigan, Wisconsin, Delaware, Maryland, Virginia, Florida, Oklahoma and Texas.

Table 3.--Soybeans: Supply, disposition, acreage and price, 1960-72

Item	Year beginning September												
	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971 1/	1972 2/
							Supply and Disposition (Million bushels)						
Supply													
Beginning stocks, Sept. 1	51.8	27.1	78.3	46.0	67.3	29.7	35.6	90.1	166.3	324.4	230.1	98.9	71.9
Production	555.1	678.6	669.2	699.2	700.9	845.6	928.5	976.1	1,103.1	1,126.3	1,123.7	1,169.4	1,286.0
Total supply	606.9	705.7	747.5	745.2	768.2	875.3	964.1	1,066.2	1,269.4	1,450.7	1,353.8	1,268.3	1,357.9
Disposition													
Crushings	406.1	431.4	472.8	436.8	479.0	537.5	559.4	576.4	605.9	737.3	760.1	721.6	
Exports	134.7	149.4	180.5	187.2	212.2	250.6	261.6	266.6	286.8	432.6	433.8	416.2	
Seed	32.5	33.3	34.6	36.0	40.3	42.9	47.1	47.8	47.7	48.9	48.3	51.1	
Feed	1.3	1.3	1.1	.9	.9	.9	1.0	.9	.8	.9	1.0	1.0	
Residual	5.2	12.0	12.5	17.0	6.1	7.8	4.9	8.2	3.8	.9	11.7	6.5	
Total disposition	579.8	627.4	701.5	677.9	738.5	839.7	874.0	899.9	945.0	1,220.6	1,254.9	1,196.4	1,290
Ending stocks, Aug. 31	27.1	78.3	46.0	67.3	29.7	35.6	90.1	166.3	324.4	230.1	98.9	71.9	
							Acreage and Yield (Million acres)						
Acreage planted	24.4	27.8	28.4	29.5	31.6	35.2	37.3	40.8	42.0	42.2	42.9	43.2	46.1
Acreage harvested for beans	23.7	27.0	27.6	28.6	30.8	34.4	36.5	39.8	41.1	41.0	42.1	42.4	45.8
Percent harvested (%)	97.1	97.1	97.2	96.9	97.2	97.7	97.9	97.5	97.8	97.2	98.1	98.1	99.3
							(Bushels)						
Yield per acre harvested	23.5	25.1	24.2	24.4	22.8	24.5	25.4	24.5	26.8	27.5	26.7	27.6	28.1
							Price (Dollars)						
Price per bushel													
Support (U.S. farm basis)	1.85	2.30	2.25	2.25	2.25	2.25	2.50	2.50	2.50	3/2.25	2.25	2.25	2.25
Received by farmers	2.13	2.28	2.34	2.51	2.62	2.54	2.75	2.49	2.43	2.35	2.85	3.01	4/3.15-3.30
No. 1 yellow, Ill. Pts.	2.53	2.41	2.50	2.59	2.81	2.91	2.86	2.61	2.54	2.53	3.00		
No. 1 yellow, Chicago	2.60	2.49	2.59	2.67	2.89	2.98	2.93	2.69	2.63	2.61	3.05		

1/ Preliminary. 2/ September indications. 3/ No. 1 grade soybeans beginning 1969 crop. Prior years No. 2 grade. Differential between No. 1 grade and No. 2 about 5¢ per bushel. 4/ Forecast.

Soybean oil exports during 1972/73 may fall a little below the 1.4 billion-pound-level of the year just ended, even though world demand for edible vegetable oils continues to increase. The major obstacle is the stiffer competition from larger U.S. cottonseed oil supplies which will primarily affect dollar sales. The outlook for soybean oil exports under P.L. 480 programs also is still unclear because of uncertainties affecting Pakistan, India and Bangladesh.

U.S. soybean oil exports

Export financing	Year beginning October			
	1968/69	1969/70	1970/71	1971/72[1]
	Million pounds	*Million pounds*	*Million pounds*	*Million pounds*
Barter	75	446	599	
CCC credits . . .	---	53	209	
Other	54	142	130	
Total commercial	129	641	939	600
Foreign sales . . .	574	604	564	
Donations	167	175	239	
Total P.L. 480	741	779	803	800
Grand total	870	1,420	1,742	1,400
%P.L. 480	85%	55%	46%	57%

[1] Preliminary.

U.S. soybean oil exports

Destination	October-July			
	1968/69	1969/70	1970/71	1971/72
	Million pounds	Million pounds	Million pounds	Million pounds
Asia & Oceania:				
India	256	201	214	140
Iran	48	119	120	113
W. Pakistan & Bangladesh .	114	317	251	229
Israel	28	21	39	40
Africa	92	146	201	271
Eastern Europe .	4	6	263	155
Western Europe	3	22	26	3
South America .	67	103	185	113
North America .	78	119	129	104
Total U.S. exports[1]	740	1,110	1,513	1,241

[1] Includes exports to other destinations not shown but excludes shipments to U.S. Territories.

SOYBEAN MEAL

Prices At Record Levels

Soybean meal prices (44% protein, Decatur) during 1971/72 averaged $90 per ton, about $12 above the previous year and the highest of record. They moved sharply upward from the seasonal low of $74 last November to over $100 in the last several months of the season. High soybean prices and the strong demand for soybean meal sparked the increase. These high prices represent a marked climb from the level of the last several years, when they averaged between $74 and $79 per ton. In the last 22 years, prices averaged over $80 only twice, in 1951/52 and 1965/66.

Prices in 1972/73 are expected to remain strong, possibly averaging 10 to 20% above the $90 last season, reflecting continuing demand for soybean meal and tight supplies. Prices on September 25 were $106 per ton, $32 above a year ago.

Soybean meal production and supplies in 1972/73 may not differ greatly from the 17 million tons last year.

Domestic use is expected to continue near the 13 million tons used in the season just ended. Important factors include a slight increase in the number of high-protein consuming animal units and favorable feeding ratios. Also, world fish meal supplies are expected to be smaller this season, due to Peru's fishing problems. According to trade sources, the Humboldt Current off Peru's coast has shifted, resulting in difficulties in locating the fish schools. Fish meal is a strong competitor of soybean meal, especially in poultry feeds. An increase of about a third in cottonseed meal supplies will partially offset the tight soybean meal and fish meal situation.

Soybean meal supplies available for export may increase slightly from the 3.8 million ton level now estimated for 1971/72. The sharp increase in bean exports will provide a large part of the soybean meal needed to meet expanding requirements overseas. World demand for soybean meal continues to increase as animal numbers expand and people upgrade their diets. Higher U.S. prices this season will tend to hold down exports, as foreign buyers shop for cheaper substitutes where possible.

Exports Declined In 1971/72

Soybean meal exports totaled around 3.8 million tons, down sharply from the record 4½ million of 1970/71 and the first drop since 1960/61. Limited supplies and higher prices were influential. Also, exports were exceptionally heavy in the latter part of the 1970/71 season, as foreign buyers apparently stocked up in anticipation of a dock strike.

Meal exports during October-August totaled 3.5 million tons, 15% below the comparable period a year ago. Volume to Western Europe—which accounts for about three-fourths of total exports—was down about 0.3 million tons. Exports also were down in the other major regions except Asia and Oceania, where they were up slightly.

Soybean meal exports now account for about one-fourth of total production, compared with about a tenth a decade ago. Roughly another 10 million short tons of meal are exported in the form of soybeans.

Soybean meal supply and use

Item	1969/70	1970/71	1971/72[1]	1972/73[2]
	Million tons	*Million tons*	*Million tons*	*Million tons*
Beg. stocks, Oct. 1	0.1	0.1	0.1	0.1
Production	17.6	18.0	17.0	17.2
Total supply .	17.7	18.1	17.1	17.3
Domestic use ..	13.5	13.4	13.2	13.2
Exports[3]	4.1	4.6	3.8	4.0
Total use	17.6	18.0	17.0	17.2
End. stocks, September 30	0.1	0.1	0.1	0.1

[1] Preliminary. [2] Forecast based on September indications. [3] Includes shipments to U.S. Territories.

U.S. soybean meal exports

Destination	October-July			
	1968/69	1969/70	1970/71	1971/72
	Thousand tons	*Thousand tons*	*Thousand tons*	*Thousand tons*
Western Europe	2,003	2,594	2,740	2,446
Eastern Europe .	274	440	486	336
Asia & Oceania .	101	165	149	151
North America .	231	251	329	292
Total U.S. exports[1]	2,616	3,464	3,722	3,259

[1] Includes exports to other destinations not shown but excludes shipments to U.S. Territories.

COTTONSEED

Supplies Up a Third

Cottonseed production this year is estimated at 5.6 million tons, about a third above last year and the largest since the 1965 crop. A 15% increase in cotton harvested acreage and better yields per acre account for the larger output.

Total supplies for 1972/73 are 5.8 million tons, compared with 4.5 million last season. Crushings are estimated at around 5.3 million tons, up from the 4.0 million of the previous year. This would produce about 1.7 billion pounds of oil and about 2½ million tons of cake and meal.

This year's larger crop indicates considerably lower prices. The season average price received by farmers likely will be in the $40's, sharply below the $57 per ton

Table 4.--Cottonseed: Harvested acreage, production, and price by States and Regions, crop years 1970-72

State and Region	Cotton acreage			Cottonseed yield per acre harvested			Cottonseed production			Price per ton received by farmers		
	Harvested		For harvest							Season average		
	1970	1971	1972	1970	1971	1972 1/	1970	1971	1972 1/	1970	1971	1972 2/
	1,000 acres	1,000 acres	1,000 acres	Pounds	Pounds	Pounds	1,000 tons	1,000 tons	1,000 tons	Dollars	Dollars	Dollars
California	662	742	874	1,508	1,332	1,517	499	494	663	66.90	63.00	----
Arizona	274	285	325	1,460	1,551	1,613	200	221	263	60.00	60.00	----
New Mexico	141	151	149	646	781	832	54	59	62	61.00	62.80	----
Nevada	2	2	2	---	---	---	3/	3/	3/	3/	3/	----
Total West	1,079	1,180	1,351	1,396	1,312	1,463	753	774	988	62.63	61.93	----
Texas	4,896	4,735	5,160	507	444	596	1,242	1,050	1,539	55.00	56.50	44.50
Oklahoma	450	396	488	351	379	455	79	75	111	58.20	56.80	----
Total Southwest	5,346	5,131	5,648	494	438	584	1,321	1,125	1,650	56.60	56.65	44.50
Missouri	250	313	410	760	1,080	. 1,073	95	169	220	47.60	55.10	50.00
Arkansas	1,070	1,140	1,440	783	868	908	419	495	654	57.30	56.60	48.00
Tennessee	390	425	480	820	998	1,021	160	212	245	53.80	55.00	45.00
Mississippi	1,190	1,325	1,622	1,060	1,001	1,076	631	663	873	56.40	57.80	----
Louisiana	450	500	670	911	916	946	205	229	317	54.10	56.00	48.00
Illinois	4/	1	1	---	---	---	3/	3/	3/	3/	3/	----
Kentucky	3	4	5	---	---	---	3/	3/	3/	3/	3/	----
Total Valley	3,353	3,708	4,628	901	954	998	1,510	1,768	2,309	53.84	56.10	47.75
Virginia	4	4	4	---	---	---	3/	3/	3/	3/	3/	----
North Carolina	160	175	175	812	560	571	65	49	50	51.00	48.50	----
South Carolina	290	320	360	600	688	683	87	110	123	50.80	52.30	----
Georgia	380	385	420	637	795	748	121	153	157	47.60	50.10	47.50
Florida	8	9	9	---	---	---	3/	3/	3/	3/	3/	----
Alabama	538	558	590	758	918	908	204	256	268	50.80	51.00	45.00
Total Southeast	1,380	1,451	1,558	691	783	768	477	568	598	50.05	50.48	46.25
Other States	---	---	---	---	---	---	7	9	9	---	---	----
Total U.S.	11,160	11,471	13,186	729	740	842	4,068	4,244	5,554	56.40	56.80	44.55

1/ Indicated September 1, based on average seed lint ratio. 2/ August-September average. 3/ Included in "other" States. 4/ Less than 500 acres.

Table 5.--Cottonseed: Supply and disposition, price and value of products, 1964-72

Item	Year beginning August								
	1964	1965	1966	1967	1968	1969	1970	1971 1/	1972 2/
					Supply and Disposition (000 tons)				
Supply:									
Stocks, August 1	168	156	204	209	61	159	80	218	235
Production	6,237	6,087	3,960	3,210	4,640	4,068	4,068	4,244	5,554
Total supply	6,405	6,243	4,164	3,419	4,701	4,227	4,148	4,462	5,789
Disposition:									
Crushed	5,926	5,734	3,791	3,107	4,363	3,925	3,728	3,958	5,300
Exports	7	9	5	3	4	23	39	4	10
Seed	222	153	149	158	156	158	163	182	175
Residual 3/	94	143	10	90	19	41	---	83	84
Total disposition	6,249	6,039	3,955	3,358	4,542	4,147	3,930	4,227	5,569
Ending stocks:	156	204	209	61	159	80	218	235	220
					Price (Dollars)				
Price per ton:									
Support to farmers 4/	44.00	43.00	48.00	48.00	48.00	37.00	37.00	5/	5/
Received by farmers	47.10	46.70	65.90	55.20	50.50	41.10	56.40	56.80	42.00
Price and value of products:									
Meal, per ton 6/	59.90	68.80	78.55	77.40	66.70	71.00	73.50	73.90	
Hulls, per ton 7/	15.00	18.00	22.00	22.00	23.00	29.60	23.00	26.00	
					Cents				
Oil, per pound 8/	11.5	12.8	12.9	12.7	11.6	12.0	14.7	13.2	
Linters, per pound 9/	3.9	4.2	6.6	5.6	4.6	3.7	3.8	4.0	
					Dollars				
Combined value 10/	77.13	86.27	97.74	93.68	82.12	86.37	94.70	89.74	
Price spread 11/	30.03	39.57	31.84	38.48	31.62	45.27	38.30	32.94	

1/ Preliminary. 2/ Forecast based on September 1 indications. 3/ Includes feed, fertilizer, and loss. 4/ Purchase price. 5/ No Program. 6/ 41-percent protein, bulk, carlots, Memphis. 7/ Carload lots, Valley. Estimated by ERS. 8/ Crude, f.o.b. Valley. 9/ Weighted average price for all grades and market points, f.o.b. mills. 10/ Combined value of products per ton crushed. 11/ Spread between combined value of cottonseed products per ton of seed crushed and season average price received by farmers for cottonseed.

Table 6.--Cottonseed oil: Supply, disposition, oil equivalent of exports of cottonseed, and price, 1959-72

Year beginning August	Supply				Disposition		Cottonseed (oil equivalent of exports)	Price per pound
	Production	Imports	Stocks, August 1	Total	Exports and shipments	Domestic disappearance		tankcars, crude, Valley
	-- Million pounds --							Cents
1959	1,861	---	212	2,073	522	1,263	3	10.0
1960	1,808	---	287	2,095	1/390	1,455	2	11.6
1961	1,865	---	250	2,115	1/470	2/1,430	2	12.4
1962	1,942	---	324	2,266	1/374	1,379	3	10.4
1963	1,981	---	514	2,495	1/483	1,387	3	9.9
1964	1,999	---	624	2,624	1/701	2/1,611	2	11.5
1965	1,896	---	421	2,317	354	1,662	3	12.8
1966	1,261	3/17	301	1,579	79	1,201	2	12.9
1967	1,036	5	298	1,338	52	1,129	1	12.7
1968	1,425	7	158	1,590	134	1,017	1	11.6
1969	1,282	---	440	1,722	439	1,069	8	12.0
1970	1,211	---	214	1,425	359	898	13	14.7
1971 4/	1,275	---	167	1,442	422	814	1	13.2
1972 5/	1,725	---	205	1,930	650	1,050	3	6/10.5
1973 7/			230					

1/ Includes estimates of foreign donations not reported by Census; beginning January 1965 foreign donations reported by Census. 2/ Factory consumption figures used for years in which reported factory consumption exceeds domestic disappearance. 3/ Includes 7 million pounds imported in July 1967 not shown in Census report. 4/ Preliminary. 5/ Forecast, except stocks, August 1. 6/ August-September average. 7/ Forecast.

Table 7.--Cottonseed oil: Utilization, by products, 1959-71

Year beginning August	Food uses					Nonfood uses			Total domestic disappearance
	Shortening	Margarine	Salad and cooking oils	Other	Total	Foots and loss	Other	Total	
	-- Million pounds --								
1959	332	122	670	20	1,144	115	4	119	1,263
1960	380	158	775	7	1,320	127	7	134	1,455
1961	356	110	847	10	1,323	101	7	108	1/1,430
1962	340	103	732	85	1,260	112	6	118	1,379
1963	351	103	808	19	1,281	95	11	106	1,387
1964	365	102	1,000	20	1,487	107	16	123	1/1,611
1965	453	119	952	27	1,552	101	10	111	1,662
1966	286	90	719	25	1,120	72	8	80	1,201
1967	270	74	682	35	1,061	59	9	68	1,129
1968	222	68	614	42	946	64	6	70	1,017
1969	296	73	576	52	997	69	9	78	1,069
1970	203	65	501	48	817	70	11	81	898
1971 2/	155	64	459	39	717	79	18	97	814
1972									
1973									

1/ Factory consumption figures used for years in which reported factory consumption exceeds domestic disappearance.
2/ Preliminary.

Table 8.--Cottonseed cake and meal: Supply, disposition and price, 1959-72

Year Beginning August	Supply				Disposition			Price per ton
	Production	Imports	Stocks, Aug. 1 1/	Total supply	Exports and shipments	Feed and other uses 2/	Total disposition	Bulk Memphis, 41% protein
	-- 1,000 tons --							Dollars
1959	2,547	32	116	2,696	147	2,359	2,506	55.65
1960	2,504	43	190	2,738	57	2,538	2,595	55.10
1961	2,506	72	143	2,721	7	2,580	2,587	59.25
1962	2,734	45	134	2,913	97	2,625	2,722	65.60
1963	2,790	33	190	3,013	55	2,709	2,764	63.35
1964	2,769	14	249	3,032	145	2,720	2,865	59.90
1965	2,695	43	168	2,906	109	2,663	2,772	68.30
1966	1,801	59	134	1,994	9	1,838	1,847	78.55
1967	1,450	47	148	1,646	3	1,485	1,488	77.40
1968	1,985	33	158	2,176	17	2,005	2,022	66.70
1969	1,835	2	155	1,992	24	1,870	1,894	71.00
1970	1,729	---	98	1,827	50	1,667	1,717	73.50
1971 3/	1,793	4/	110	1,903	27	1,774	1,801	73.90
1972 5/	2,450	---	102	2,552	100	2,352	2,450	6/89
1973 7/			100					

1/ Stocks at crushing mills. 2/ Includes small quantities of cottonseed meal used for fertilizer on farms of cotton growers. 3/ Preliminary. 4/ Less than 500 tons. 5/ Forecast, except stocks, August 1. 6/ August-September average. 7/ Forecast.

of 1971. August-September prices averaged $45 with peak marketings yet to come. While no CCC price support program for 1972-crop cottonseed has been announced, the Secretary of Agriculture has indicated one could be introduced if needed. Under the most recent support program in 1970, cottonseed was supported at $37 per ton (basis 100 grade).

COTTONSEED OIL

Supply and Use to Expand

Cottonseed oil supplies this marketing year will total 1.9 billion pounds, a third above the previous year. Greater oil production from the 1972 cottonseed crop mainly accounts for the increase, although starting stocks also were larger. Carryover stocks (crude and refined) on August 1 totaled 205 million pounds, nearly a fourth above a year ago.

With increased supplies, prices are expected to decline sharply, making cottonseed oil more competitive with soybean oil. Prices (crude, Valley) have declined from 11 cents per pound in August to 10 cents in September and are down sharply from the 15 cent level of a year ago. For the entire season, they probably will average somewhere near 10 cents. During 1971/72, they averaged around 13 cents.

Exports are projected to increase over 0.6 billion pounds compared with 0.4 billion in 1971/72. Most of this volume likely will be shipped to Western Europe and Egypt—the 2 major markets for U.S. cottonseed oil. Other countries which bought sizable quantities last marketing year were Venezuela and Iran.

An increase in domestic disappearance is expected. Use may total about 1 billion pounds, compared with the record low of 0.8 billion pounds last season. More abundant supplies and lower prices will encourage increased usage in all major categories—shortening, margarine, and cooking and salad oils. Cottonseed oil once was the major vegetable oil used in the United States, with consumption hitting a record 2 billion pounds in the late 1930's. Since then, usage has trended downward, due mainly to reduced production and tough competition from soybean oil.

COTTONSEED MEAL

Prices Strong Despite More Production

Prospective cottonseed meal supplies this season are about 2½ million tons, a third above 1971/72. However, demand for protein meals continues strong, and the larger quantities are expected to be readily used. Domestic disappearance likely will total around 2.3 million tons, a half million tons more than last year. Increasing beef cattle production and favorable livestock prices are expected to boost meal usage.

During the 1971/72 marketing year, cottonseed meal prices (41% protein, expeller, Memphis) averaged $74 per ton, not much changed from the year before. Prices drifted erratically downward from the high at the beginning of the season but strengthened again in July. Spot prices in mid-September averaged near $90 per ton, and are expected to continue above year-earlier levels, reflecting the good demand for high-protein feeds.

LARD

Output Near 35-Year Low

Lard production in the 1971/72 marketing year just ended totaled around 1.7 billion pounds, 0.4 billion below the previous year. A 8% decrease in hog slaughter plus a sharp decline in lard yield per hog reduced output to the lowest level in about 35 years. The drop in lard yields—around 2½ pounds—was one of the sharpest annual declines in the postwar period. When pork supplies are short and hog prices high, as in 1971/72, there is a tendency for packers to trim less fat from the pork cuts and to utilize more in sausage manufacture.

Direct Use Down Sharply

Domestic use of lard totaled about 1.4 billion pounds, some 13% below 1970/71. Direct use fell nearly a fourth. Use in shortening declined slightly, while use in margarine was up a little. This reduced consumption matches the decline of 1969/70 and is now at one of the lowest levels since the late 1930's. Production has declined in recent years, and the use of animal fats in general has been declining. Consumers have a wide choice in baking and frying fats, many of them made entirely from vegetable oils or animal fats while others are blends of vegetable oils and meat fats.

Lard exports and shipments totaled over 0.2 billion pounds, nearly 50% below the previous season. Most of this went to the United Kingdom, the only major export outlet for U.S. lard. As in recent past years, exports to that country moved under the export payment program at a payment rate of 1 cent per pound. During the marketing year, a little over 100 million pounds were accepted for export under the program compared with about 270 million pounds in 1970/71.

Lard prices (tanks, loose, Chicago) during 1971/72 averaged about 10½ cents per pound, around a half cent below the previous year. The lower price level partially reflects declining domestic use and exports and some buildup in stocks. Also, the general price trend for most major food fats has been downward in recent months, and lard prices are reflecting this trend.

PEANUTS

Supply Up A Little

Peanut supplies this marketing year are 3½ billion pounds, nearly 2% above last season's record. Production as of September 1 is forecast at 3.1 billion pounds, Table 9.--Food fats and oils: Supply, disposition, and per capita disappearance, 1962-71

Item	Year beginning October									
	1962	1963	1964	1965	1966	1967	1968	1969	1970 1/	1971 2/
	-- Million pounds --									
Stocks, October 1										
Butter	3/419	3/450	3/188	161	68	212	197	155	171	222
Lard	73	81	68	62	64	107	94	56	60	77
Tallow, edible	21	34	25	22	40	70	39	26	37	63
Corn oil	50	63	62	35	55	47	41	71	60	58
Cottonseed oil	296	488	433	236	202	207	99	377	121	94
Soybean oil	618	920	578	297	462	596	540	415	543	773
Palm oil	16	4/37	4/22	10	17	13	28	28	20	36
Peanut oil	11	30	8	18	34	31	14	17	12	24
Safflower oil	46	80	24	35	50	60	76	61	29	29
Sub-total	1,550	2,183	1,407	876	992	1,343	1,128	1,206	1,054	1,376
Finished products 5/	473	347	232	197	224	256	231	217	236	236
Total food fats and oils	2,023	2,530	1,640	1,073	1,216	1,599	1,359	1,423	1,290	1,612
Imports										
Butter	2	2	1	4	2	2	2	2	2	2
Tallow, edible	6/	1	1	1	1	2	6/	6/	6/	6/
Olive oil	37	66	47	47	55	60	58	63	67	70
Corn oil	15	3	---	10	2	9	8	3	1	---
Cottonseed oil	---	---	---	---	17	13	6/	6/	6/	---
Palm oil	27	8	5	41	89	72	161	122	207	450
Peanut oil	1	---	---	6/	---	6/	6/	6/	6/	6/
Sesame oil	1	1	1	2	1	1	2	2	2	2
Total	83	81	55	104	167	159	231	191	279	524
Production										
Butter	1,491	1,454	1,412	1,120	1,235	1,185	1,139	1,128	1,150	1,125
Lard	2,495	2,475	2,205	1,900	2,066	2,067	1,969	1,833	2,044	1,675
Tallow, edible	475	572	528	551	597	540	520	566	550	510
Oleo oil & stearine 7/	4	6	7	12	14	6	6	11	4	5
Corn oil	379	413	435	449	446	442	467	474	485	500
Cottonseed oil	1,927	1,936	1,999	1,830	1,223	1,020	1,450	1,251	1,235	1,350
Soybean oil	5,091	4,822	5,146	5,800	6,076	6,032	6,531	7,904	8,265	7,850
Peanut oil	91	114	144	163	175	198	199	180	266	265
Safflower oil (estimate)	152	104	111	138	170	139	100	100	120	140
Sub-total	12,106	11,896	11,987	11,963	12,001	11,629	12,381	13,446	14,120	13,420
Oilseeds (oil equivalent of exports)	1,989	2,115	2,361	2,940	3,050	3,078	3,210	5,007	4,857	4,631
Total Supply	16,201	16,622	16,043	16,080	16,435	16,465	17,181	20,067	20,546	20,187
Exports and Shipments										
Butter	8/131	8/319	150	24	7	31	37	8	27	125
Lard	571	706	431	218	247	246	282	405	382	225
Tallow, edible	5	4	5	3	5	6	8	11	6	5
Oleo oil & stearine	4	6	7	12	14	6	6	11	4	5
Corn oil	---	---	---	---	18	25	29	34	43	50
Cottonseed oil	8/389	8/584	641	275	78	51	141	453	373	475
Soybean oil	8/1,165	8/1,106	1,357	948	1,105	993	899	1,449	1,782	1,450
Peanut oil	4	67	75	14	6	4	28	34	60	70
Processed food oils 9/	94	111	79	64	76	59	61	63	67	65
Sub-total	2,362	2,903	2,744	1,558	1,557	1,427	1,490	*2,493	*2,744	*2,510
Oilseeds (oil equivalent)										
Cottonseed	3	3	3	3	2	1	1	9	12	1
Soybeans	1,984	2,103	2,265	2,764	2,930	2,972	3,148	4,941	4,764	4,500
Peanuts (for crushing abroad)	2	9	29	43	47	28	9	12	58	75
Safflower	---	---	64	130	71	77	52	45	23	55
Sub-total	1,989	2,115	2,361	2,940	3,050	3,078	3,210	5,007	4,857	4,631
Total exports	4,351	5,018	5,104	4,498	4,608	4,505	4,700	7,500	7,601	7,141
Domestic disappearance										
Butter	1,332	1,399	1,291	1,193	1,088	1,172	1,146	1,106	1,075	1,050
Lard	1,904	1,786	1,780	1,676	1,781	1,834	1,726	1,425	1,645	1,450
Tallow, edible	457	578	527	530	563	567	526	544	518	520
Corn oil	381	416	462	439	438	432	416	454	445	420
Cottonseed oil	1,347	1,407	1,555	1,590	1,157	1,090	1,031	1,052	890	800
Soybean oil	3,624	4,058	4,069	4,687	4,837	5,096	5,756	6,328	6,253	6,350
Olive oil	37	66	47	47	55	60	58	63	67	70
Palm oil	43	23	17	34	93	57	161	130	191	385
Peanut oil	69	69	59	133	172	211	168	151	193	200
Safflower oil (estimate)	119	160	100	123	159	124	115	107	100	100
Sesame oil	1	1	1	2	1	1	2	2	2	2
Processed food oils 9/	-94	-111	-79	-64	-76	-59	-61	-63	-67	-65
Total	9,220	9,852	9,829	10,390	10,268	10,585	11,044	11,298	11,316	11,282
Total (calculated net) 10/	9,346	9,967	9,864	10,363	10,236	10,610	11,058	11,277	11,333	
Total use for food 11/	8,845	9,605	9,298	10,044	10,030	10,316	10,590	10,988	11,059	11,050
	-- Pounds --									
Per capita disappearance										
Butter (fat content)	5.7	5.9	5.4	4.9	4.4	4.7	4.6	4.4	4.2	3.9
Margarine (fat content)	7.8	7.6	7.9	8.3	8.6	8.5	8.5	8.7	8.7	8.8
Lard (direct use)	6.5	6.4	6.2	5.7	5.4	5.4	5.2	4.5	4.6	3.7
Baking and frying fats	13.6	14.0	13.7	16.0	15.7	16.1	16.7	17.6	17.0	16.7
Salad and cooking oils	10.6	12.0	12.3	13.0	12.8	13.2	14.0	15.0	15.6	16.5
Other edible uses	1.3	2.9	1.4	2.2	2.5	2.4	2.3	2.6	2.3	2.5
Total (fat content)	45.5	48.8	46.7	50.1	49.5	50.4	51.3	52.8	52.5	52.0

1/ Preliminary. 2/ Forecast except October 1 stocks. 3/ Includes estimates of butter oil, ghee, and canned butter. 4/ Includes stocks held by GSA. 5/ Shortening, margarine (fat content), and salad and cooking oils. 6/ Less than 500,000 pounds. 7/ Represents exports only; production data are not available. 8/ Includes estimates of foreign donations of fats and oils, not reported by Census. 9/ Includes exports of processed food oils not classified by kind, shortening and other secondary fats. 10/ Adjusted to reflect changes in stocks of finished products. 11/ Excludes food fats and oils used for non-food purposes, but includes non-food oils (coconut and palm kernel) used in food. *Includes safflower oil not shown separately above.

Table 10.--Peanuts: Acreage, production and price, by States and Areas, 1969-72

State and Area	Acreage harvested for nuts				Yield per acre harvested				Production 1/				Price per pound received by farmers Season average			
	1969	1970	1971	1972 2/	1969	1970	1971	1972 3/	1969	1970	1971	1972 3/	1969	1970	1971	1972 4/
	1,000 acres	1,000 acres	1,000 acres	1,000 acres	Pounds	Pounds	Pounds	Pounds	Million pounds	Million pounds	Million pounds	Million pounds	Cents	Cents	Cents	Cents
Virginia	102	102	92	102	2,325	3,060	2,365	2,700	237.2	312.1	217.6	275.4	13.1	13.6	14.2	---
North Carolina	167	167	155	167	2,055	2,670	2,100	2,700	343.2	445.9	325.5	450.9	13.1	13.2	14.0	---
Total Va.-N.C. area	269	269	247	269	2,157	2,818	2,199	2,700	580.3	758.0	543.1	726.3	13.1	13.4	14.1	---
South Carolina	13	13.8	15	19	1,550	1,880	2,000	1,700	20.2	25.9	30.0	32.3	12.5	12.7	14.1	15.0
Georgia	502	507	510	512	1,885	2,220	2,490	2,350	946.3	1,125.5	1,269.9	1,203.2	12.2	12.8	13.5	14.0
Florida	53	53	54	53	1,605	2,075	2,590	2,200	85.1	110.0	139.9	116.6	12.0	13.0	14.0	14.0
Alabama	187	190	194	197	1,525	1,660	2,070	1,850	285.2	315.5	401.6	364.4	11.7	12.8	13.8	14.2
Mississippi	2	4	9.5	9	600	1,100	1,785	1,200	1.2	4.4	17.0	10.8	22.0	15.0	12.5	---
Total S.E. area	757	767.8	782.5	790	1,767	2,059	2,375	2,187	1,337.9	1,581.3	1,858.3	1,727.4	12.1	12.8	13.6	14.3
Oklahoma	120	116	119	119	1,700	1,655	1,840	1,760	204.0	192.0	219.0	209.4	12.2	12.2	13.4	---
Texas	297	306	297	304	1,310	1,405	1,235	1,430	389.1	429.9	366.8	434.7	11.9	12.2	12.8	13.0
New Mexico	7.7	8.2	8	8	2,270	2,230	2,070	2,300	17.5	18.3	16.6	18.4	13.3	14.4	14.5	---
Total S.W. area	424.7	430.2	424	431	1,438	1,488	1,421	1,537	610.5	640.2	602.3	662.6	12.0	12.3	13.1	13.0
United States	1,450.7	1,467.0	1,453.5	1,490	1,743	2,031	2,067	2,091	2,528.7	2,979.5	3,003.7	3,116.2	12.3	12.8	13.6	13.9

1/ Farmers' stock basis, net weight. 2/ Preliminary. 3/ September 1 indications. 4/ August-September average.

Table 11.--Peanuts (farmers' stock basis): Supply, disposition, and price, 1950-72

Year beginning August 1	Supply				Disposition						Price per pound	
								Domestic food use				
									Civilian			
	Production	Imports	Beginning stocks August 1	Total supply	Exports and shipments	Crushed for oil	Seed, feed, farm loss and shrinkage	Military	Total	Per capita	Received by farmers	Support
	-- Million pounds --									Pounds	Cents	Cents
1950	2,035	---	187	2,222	69	629	211	14	967	6.4	10.9	10.8
1951	1,659	---	332	1,991	8	432	120	10	1,005	6.6	10.4	11.5
1952	1,356	---	416	1,772	3	195	144	10	998	6.4	10.9	12.0
1953	1,574	1/	422	1,996	239	303	151	10	1,007	6.4	11.1	11.9
1954	1,008	180	286	1,474	9	107	130	7	1,012	6.3	12.2	12.2
1955	1,548	5	209	1,762	6	257	157	1	954	5.8	11.7	12.2
1956	1,607	5	387	1,999	102	260	152	3	1,026	6.1	11.2	11.4
1957	1,436	2	456	1,894	48	239	162	3	1,081	6.4	10.4	11.1
1958	1,814	2	361	2,177	62	335	170	8	1,088	6.3	10.6	10.66
1959	2/1,523	1	514	2,038	72	292	96	3	1,151	6.5	9.6	9.68
1960	1,718	1/	424	2,142	81	362	87	8	1,236	6.9	10.0	10.06
1961	1,657	3	368	2,028	34	256	84	7	1,258	6.9	10.9	11.05
1962	1,719	2	389	2,110	43	302	75	8	1,285	6.9	11.0	11.07
1963	1,942	2	397	2,341	97	380	107	5	1,342	7.1	11.2	11.20
1964	2,099	2	410	2,511	179	473	75	8	1,403	7.4	11.2	11.20
1965 3/	2,384	1	373	2,758	238	517	137	14	1,431	7.4	11.4	11.20
1966	2,410	2	412	2,824	222	587	211	2	1,418	7.3	11.3	11.35
1967	2,473	2	4/372	2,847	198	644	156	3	1,493	7.6	11.4	11.35
1968	2,543	2	353	2,898	105	654	243	3	1,536	7.7	11.9	12.01
1969	2,529	1	357	2,888	140	581	237	3	1,574	7.8	12.3	12.38
1970	2,979	2	353	3,334	290	799	209	3	1,580	7.8	12.8	12.75
1971 5/	3,004	2	453	3,459	550	814	80	1/	1,623	7.9	13.6	13.42
1972 6/	3,116	2	392	3,510	500	850	85	---	1,675	8.1	14.3	14.25
1973 6/			400									
1974												
1975												

1/ Less than 500,000 pounds. 2/ Beginning with 1959 crop, production reported on a net weight basis. Prior years were gross weight. 3/ Beginning 1965 reported crush and export of shelled peanuts converted to farmers' stock by 1.33 factor. 4/ Net weight basis beginning 1967. 5/ Preliminary. 6/ Forecast.

nearly 4% above 1971. Harvested acreage is up about 2% to 1.5 million acres. Acreage allotments were again at the legal minimum of 1.6 million acres. At 2,091 pounds, yields per acre are up about 24 pounds or 1% from a year ago. Production is up in the Virginia-North Carolina area and the Southwest area, but down 7% in the Southeast. As in past years, output is well in excess of requirements for food and farm use, and about a third of the crop likely will be acquired by CCC.

Edible Use Increases

Roughly three-fifths of production is domestically consumed in edible products such as peanut butter, peanut candy, salted and roasted nuts. This consumption has been increasing about 2 to 3% annually, somewhat slower than production. Per capita use is now about 8 pounds (farmers' stock basis). In 1971/72, food use totaled 1.6 billion pounds, up about 2½% from the year before. Most major categories showed an increase. During 1972/73, usage is expected to increase slightly again, and may total near the 1.7-billion-pound level.

The 1972 peanut crop is being supported at a national average loan rate of $285.00 per ton (14.25 cents per pound), $16.50 above the previous year. This is 75% of the August 1, 1972, parity price. Support by type is as follows:
Virginia, $292; Runner, $288; Southeast Spanish, $280; Southwest Spanish, $276; and Valencia (suitable for cleaning and roasting) $292.

During 1971/72, the season average price received by farmers was 13.6 cents per pound, up from the 12.8 cents of the year before. Prices this season likely will average around 14 cents, or at support.

INEDIBLE TALLOW

Domestic Use Up; Exports Down

Production of inedible tallow and grease in the 1971/72 marketing year ended September 30 totaled 5.1 billion pounds, about 3% below the previous year. Reduced livestock slaughter and apparently lower recovery of fat per animal account for the decline.

Domestic disappearance totaled 2.7 billion pounds, up from last season and matching the record 1969/70 year. Increased use in fatty acids mainly accounted for the gain, as usage in the other major categories changed little. Use in animal feeds is now the principal domestic outlet for tallow, accounting for over 1 billion pounds annually. Soap, while down about 50% from the levels of the early 1950's, is still the second largest outlet, using a little over 600 million pounds. Use in fatty acids now accounts for about 600 million pounds, while use in lubricants is close to 100 million pounds.

Exports were near 2.5 billion pounds, down from the 2.6 billion of 1970/71. Despite increases in several countries, volume was down in some of the more important ones such as India and the Netherlands. Exports to India were affected by the war last winter. Western Europe, Japan, and India are the principal foreign outlets for U.S. tallow, accounting for over half of total exports.

Inedible tallow prices (prime, c.a.f. delivered, Chicago) in 1971/72 averaged 6½ cents per pound, about 1 cent below the previous year. They dipped to about 5½ cents last winter but since have moved up to around 7 cents. The recent strength partly reflects the slowdown in production and reduced stocks.

STRUCTURAL CHANGES IN THE U.S. FLAXSEED-LINSEED OIL INDUSTRY

by
George W. Kromer

ABSTRACT: Flaxseed, although declining in economic importance since World War II, remains the Nation's third most important oilseed crop. Flaxseed output and use have been halved as demand and price for linseed oil have fallen sharply. The protective coatings industry, the major market for linseed oil, has shifted from fats and oils to synthetic vehicles and non-oil products. Technological changes in the consuming industries along with wide swings in linseed oil prices are largely responsible. As a result, the flaxseed-linseed oil industry has undergone drastic changes in production, processing, and marketing.

KEY WORDS: Flaxseed industry, flaxseed economic decline, linseed oil and linseed meal.

Background

For many years before World War II, U.S. flaxseed production was insufficient to meet requirements of industry, and much flaxseed was imported, chiefly from Argentina. At that time the United States was a net importer of fats and oils—bringing in large quantities of tropical oils and oil-bearing materials. The largest flaxseed crushing mills were on the seaboard. During World War II U.S. production of flaxseed, as well as soybeans, expanded greatly to meet sharply increased war demand for domestic fats and oils. The stoppage of imports of vegetable oils from enemy-occupied territories further increased dependence on domestic supplies. And imports of Argentine flaxseed were curtailed by shortage of transportation and other circumstances. U.S. flaxseed acreage increased from about 2 million prewar to over 6 million in 1943 when production reached 50 million bushels. Acreage and production, which had been sustantial in many States, then declined.

Flaxseed production was then encouraged by high price supports to overcome postwar shortages of fats and oils. For the 1947 and 1948 crops, the CCC support price was $5.75 per bushel. U.S. flaxseed production peaked in 1948 at 55 million bushels. CCC acquired large quantities of flaxseed in carrying out price support operations. Subsequently, support rates were cut sharply and flax production started on a longterm downtrend as the demand for linseed oil lessened.

The 1972 flaxseed crop, estimated at 15 million bushels, is only about a fourth as large as the 1948 record and is the smallest crop since 1938. Farm value of output dropped from $313 million in 1948 to an estimated $39 million this year. Lower prices along with reduced output account for the precipitous drop.

This article analyzes changes in the flaxseed industry during 1950-71.

Industry Declines 2% Annually

The U.S. flaxseed[1] economy has witnessed abrupt changes over the past 2 decades, resulting in declining flaxseed production, reduced consumption of linseed oil, and attrition in the number of linseed oil crushers.

Flaxseed output dropped from 40 million bushels in 1950 to 19 million in 1971—a decline of over 50%. Both output and crush during 1950-71 fell at an average annual rate of 1 million bushels, or about 2%. The greatest decreases occurred during the 1950's (table 12).

Production Concentrated in 3 States

U.S. flaxseed production is centered in North Dakota, South Dakota, and Minnesota. This area produces about 95% of the Nation's crop, with North Dakota alone accounting for about half (table 13). Iowa and Montana grow small amounts. Conditions in this general region are favorable to growing flax, and large acreages of land have been available. The crushing industry has become largely located in this area. Flax is also grown in California, Texas, and Arizona, where most of the crop is sown in the fall or early winter.

U.S. flaxseed acreage harvested since 1950 has dropped from 4.1 million acres to 1.2 million in 1972. Acreage had increased to about 5½ million by the

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[1] Flax plants are classified by botanists as linum—a member of the linaceae family. Both fiber and seed flax plants are scientifically classified as Linum usitatissimum L. It is from this Latin scientific botanical classification that the products of flaxseed such as linseed oil derive their commercial names, and it accounts for the fact that flaxseed is often referred to as linseed.

Table 12.--Decline pattern of U.S. flaxseed-linseed oil industry, average 1950-59 and 1960-71

Indicator (year beginning July)	Unit of volume	Base crop years			Average annual rate of change						Change from previous year		
		1950	1960	1971 1/	1950-59		1960-71		Total 21 years (1950-71)		Increase	Decrease	No change
		Volume	Volume	Volume	Volume	Percent	Volume	Percent	Volume	Percent	-- Number of years --		
Flaxseed													
Harvested acres	Thou. acre	4,090	3,342	1,580	-129	-1.7	-113	-2.8	-120	-2.3	9	12	0
Yield per acre harvested	Bushels	9.8	9.1	11.8	-0.3	1.8	0.4	6.7	0.1	4.6	11	10	0
Total production	Mil. bu.	40.2	30.4	18.7	-2.1	-2.1	-0.2	3.8	-1.0	1.3	9	12	0
Farm value of production	Mil. dol.	134.5	80.5	44.9	-7.9	-4.2	-1.6	0.6	-4.3	-1.5	8	13	0
Total utilization	Mil. bu.	44.9	28.1	25.7	-1.3	-1.5	-0.6	-1.3	-0.9	-1.4	11	10	0
Crushings	Mil. bu.	42.3	20.0	21.0	-2.1	-5.1	-0.2	2/	-1.0	-2.1	10	10	1
Exports	Mil. bu.	2.9	7.0	1.9	0.6	167.5	-0.6	7.3	-0.1	75.9	10	11	0
Planting seed	Mil. bu.	2.7	2.1	1.0	-0.03	4.2	-0.12	-5.5	-0.08	-1.4	9	12	0
Stocks, July 1	Mil. bu.	17.0	3.0	26.8	-0.3	32.5	1.0	25.0	0.5	28.2	11	10	0
Season average price received by farmers	Dol./bu.	3.34	2.65	2.41	-0.04	-0.8	-0.05	-1.4	-0.05	-1.2	9	12	0
Linseed oil													
Total production	Mil. lb.	844	399	426	-42	-5.2	-3	0.2	-20	-2.1	10	11	0
Total utilization	Mil. lb.	754	394	352	-31	-3.5	-9	-1.3	-19	-2.2	9	12	0
Total domestic use	Mil. lb.	728	370	286	-34	-5.6	-12	-3.2	-22	-4.2	7	14	0
Use in paints and varnish	Mil. lb.	526	309	231	-20	-4.3	-10	-3.1	-14	-3.6	6	15	0
Use in linoleum and oilcloth	Mil. lb.	107	22	8	-9	-11.9	-2	-8.6	-5	-10.0	3	13	5
Total use in drying oil products	Mil. lb.	702	361	269	-33	-5.5	-12	-3.4	-21	-4.3	6	13	2
Exports	Mil. lb.	26	24	66	3/	3/	3	69.3	3/	3/	13	8	0
Price (raw oil, Minneapolis)	Cents/lb.	18.8	12.9	8.9	-0.6	-3.4	-0.4	-3.0	-0.5	-3.2	14	6	1
Linseed meal													
Total production	Thou. ton	770	378	385	-38	-4.9	-3	2/	-18	-2.1	11	10	0
Total utilization	Thou. ton	758	401	388	-41	-6.2	4/	0.8	-18	-2.2	8	13	0
Domestic use	Thou. ton	743	362	271	-46	-7.9	-4	-0.4	-22	-3.6	6	15	0
Exports	Thou. ton	15	39	117	6	97.8	4	24.5	5	55.9	11	10	0
Price (34% protein Minneapolis)	Dol./ton	58.70	53.35	67.80	0.47	1.5	0.40	1.1	0.43	1.3	8	13	0
Paint, varnish and lacquers													
Total production 5/	Mil. gal.	641	663	874	1	0.5	19	3.7	11	2.4	12	9	0

1/ Preliminary.
2/ Less than 0.1 percent.
3/ Not meaningful because of heavy CCC sales during 1953-55.
4/ Less than 500 tons.
5/ Calendar year data.

Table 13.--Flaxseed: Production by States, price received by farmers, and farm value, 1950-72

Year beginning July	Flaxseed production									Season average price received by farmers	Farm value of --	
	Tri-State area											
	North Dakota	South Dakota	Minnesota	Total	Pct. of U.S.	Texas	California	All other States 1/	Total U.S. production		Production	Sales
	-- Thou. bushels --				Percent	-- Thou. bushels --				Dol. per bu.	--Thou. dollars --	
1950	17,181	4,527	13,387	35,095	87	1,268	1,416	2,457	40,236	3.34	134,531	129,062
1951	16,226	4,584	10,845	31,655	91	75	1,738	1,228	34,696	3.72	128,841	123,515
1952	12,216	4,140	10,480	26,836	89	1,062	1,408	789	30,184	3.73	112,458	105,996
1953	19,165	6,840	9,265	35,270	94	868	732	786	37,656	3.64	136,926	128,882
1954	23,520	5,928	8,928	38,376	93	588	1,189	1,121	41,274	3.05	125,937	119,255
1955	23,750	5,783	8,008	37,541	93	96	1,740	1,038	40,415	2.90	117,349	110,641
1956	28,700	6,368	9,950	45,018	96	126	1,081	812	47,037	2.99	140,846	134,071
1957	14,476	4,914	3,702	23,092	92	126	1,295	600	25,113	2.94	73,744	69,075
1958	19,426	8,312	6,993	34,731	93	336	1,642	700	37,409	2.69	100,582	96,850
1959	10,129	3,432	5,016	18,577	87	462	1,710	488	21,237	3.00	63,795	59,605
1960	15,054	5,108	7,592	27,754	91	1,112	957	579	30,402	2.65	80,533	77,173
1961	8,262	5,026	6,444	19,732	89	1,610	570	266	22,178	3.26	72,405	68,251
1962	19,524	6,058	5,100	30,682	95	188	896	464	32,230	2.83	91,252	87,348
1963	16,435	5,890	7,104	29,429	95	635	400	577	31,041	2.76	85,702	82,130
1964	13,440	4,607	4,620	22,667	93	1,230	216	288	24,401	2.82	68,901	65,412
1965	19,560	7,966	6,216	33,742	95	940	225	495	35,402	2.80	99,168	95,852
1966	13,203	5,373	3,838	22,414	96	712	60	204	23,390	2.89	67,620	64,876
1967	9,381	6,591	3,783	19,755	99	150	51	80	20,036	2.95	59,099	56,358
1968	13,860	7,672	4,606	26,138	97	742	72	115	27,067	2.81	75,930	72,783
1969	18,188	9,454	5,820	33,462	95	1,300	120	240	35,122	2.65	93,084	89,729
1970	16,440	7,392	4,477	28,309	94	1,125	78	458	29,970	2.40	71,803	69,768
1971 2/	9,041	5,980	3,480	18,501	99	70	---	82	18,653	2.41	44,895	43,348
1972 2/	7,533	5,200	2,028	14,761	98	165	---	125	15,051	3/2.60	3/39,000	
1973												
1974												
1975												

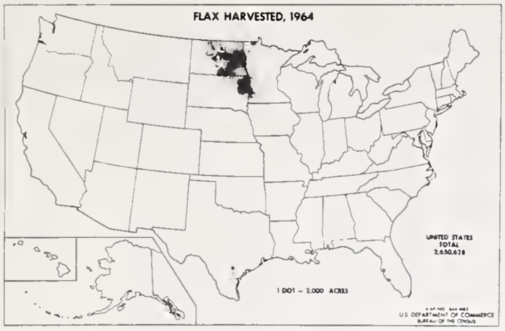
1/ Includes Arizona, Illinois, Iowa, Kansas, Michigan, Missouri, Montana, Oklahoma, Oregon, Washington, Wisconsin and Wyoming.
2/ Preliminary. 3/ Forecast.

Table 14.--Flaxseed: Harvested acreage, production, and price received by farmers, Tri-State area, 1950-72

Year beginning July	North Dakota				South Dakota				Minnesota			
	Acreage harvested	Production		Season average price received by farmers	Acreage harvested	Production		Season average price received by farmers	Acreage harvested	Production		Season average price received by farmers
		Per acre	Total			Per acre	Total			Per acre	Total	
	Thou. acres	Bushel	Thou. bushel	Dol. per bushel	Thou. acres	Bushel	Thou. bushel	Dol. per bushel	Thou. acres	Hushel	Thou. bushel	Dol. per bushel
1950	1,909	9.0	17,181	3.26	503	9.0	4,527	3.37	1,217	11.0	13,387	3.41
1951	1,909	8.5	16,226	3.66	573	8.0	4,584	3.61	1,205	9.0	10,845	3.68
1952	1,527	8.0	12,216	3.64	487	8.5	4,140	3.75	1,048	10.0	10,480	3.78
1953	2,489	7.7	19,165	3.62	760	9.0	6,840	3.67	1,090	8.5	9,265	3.67
1954	3,360	7.0	23,520	3.02	988	6.0	5,928	3.06	992	9.0	8,928	3.12
1955	3,125	7.6	23,750	2.88	751	7.7	5,783	2.85	843	9.5	8,008	2.94
1956	3,500	8.2	28,700	2.96	796	8.0	6,368	2.99	995	10.0	9,950	3.04
1957	3,290	4.4	14,476	2.90	756	6.5	4,914	2.95	617	6.0	3,702	2.98
1958	2,369	8.2	19,426	2.64	665	12.5	8,312	2.69	518	13.5	6,993	2.74
1959	1,777	5.7	10,129	3.01	572	6.0	3,432	3.00	456	11.0	5,016	3.05
1960	1,955	7.7	15,054	2.55	601	8.5	5,108	2.67	584	13.0	7,592	2.74
1961	1,271	6.5	8,262	3.20	529	9.5	5,026	3.34	537	12.0	6,444	3.36
1962	1,627	12.0	19,524	2.78	577	10.5	6,058	2.86	510	10.0	5,100	2.92
1963	1,806	9.1	16,435	2.73	589	10.0	5,890	2.77	592	12.0	7,104	2.81
1964	1,680	8.0	13,440	2.82	542	8.5	4,607	2.82	462	10.0	4,620	2.89
1965	1,630	12.0	19,560	2.77	569	14.0	7,966	2.83	444	14.0	6,216	2.86
1966	1,467	9.0	13,203	2.87	597	9.0	5,373	2.94	404	9.5	3,838	2.97
1967	1,144	8.2	9,381	2.90	507	13.0	6,591	2.99	291	13.0	3,783	3.01
1968	1,155	12.0	13,860	2.78	548	14.0	7,672	2.82	329	14.0	4,606	2.86
1969	1,455	12.5	18,188	2.62	652	14.5	9,454	2.68	388	15.0	5,820	2.69
1970	1,644	10.0	16,440	2.36	704	10.5	7,392	2.44	407	11.0	4,477	2.49
1971 1/	861	10.5	9,041	2.36	460	13.0	5,980	2.44	240	14.5	3,480	2.48
1972 1/	655	11.5	7,533	2/2.53	416	12.5	5,200	2/2.60	156	13.0	2,028	2/2.64
1973												
1974												
1975												

1/ Preliminary. 2/ July-September average.

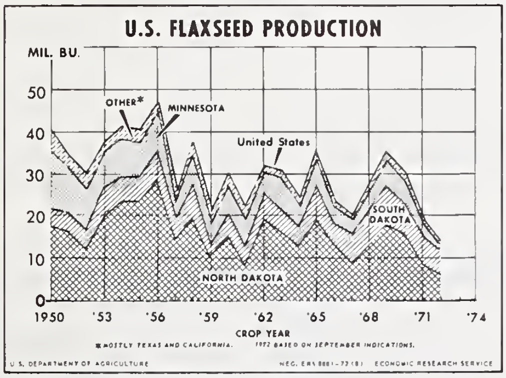
NOTE: The Tri-State area accounts for about 95 percent of the U.S. flaxseed production as indicated in table 13 above.



FLAX HARVESTED, 1964

mid-1950's but since has shown a fairly steady downtrend. The average annual rate of decline during 1950-71 was 120,000 acres or about 2%.

While acreage declined in all flax producing States, the sharpest drop occurred in Minnesota and North Dakota—with each losing more than 1 million acres since 1950 (table 14).



U.S. FLAXSEED PRODUCTION

*MOSTLY TEXAS AND CALIFORNIA. 1972 BASED ON SEPTEMBER INDICATIONS.

U.S. DEPARTMENT OF AGRICULTURE NEG. ERS 8881-72 (8) ECONOMIC RESEARCH SERVICE

Flaxseed Loses Competitive Strength

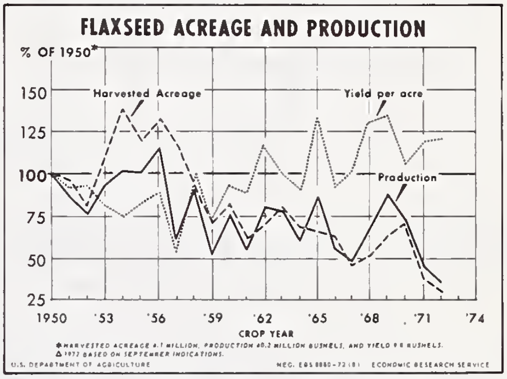
In the tri-State area, flax usually competes for cropland with oats and barley. It is less competitive with corn and soybeans and seldom competes with wheat. Flaxseed has lost competitive strength as a cash crop over the past 2 decades, as prices trended downward and yields per acre showed little increase.

In these 3 States harvested acreages of flaxseed, oats and barley declined sharply during 1950-71 while soybeans and corn increased. Wheat acreage declined slightly.

Acreage changes are relatively large for all crops in the Great Plains because of the weather hazards and their effects on farmers' decisions during the planting season. But flax acreage varies more than acreage for the main crops. This is because flax is considered an alternative among crops planted on acreage left after the major cash crop is planted, or as a crop in a rotation.

Annual Yields Fluctuate Widely

U.S. flaxseed yields per acre vary considerably from year to year, mainly because of the fluctuations in growing conditions and weather, particularly rainfall, in the main producing belt.



FLAXSEED ACREAGE AND PRODUCTION

*HARVESTED ACREAGE 4.1 MILLION, PRODUCTION 40.2 MILLION BUSHELS, AND YIELD 9.8 BUSHELS.
△1972 BASED ON SEPTEMBER INDICATIONS.

U.S. DEPARTMENT OF AGRICULTURE NEG. ERS 8880-72 (8) ECONOMIC RESEARCH SERVICE

During 1950-71 yields ranged from 5.2 bushels in 1957 to 13.4 in 1969. They averaged generally higher during the 1960's than in the 1950's (table 15). Crop yields typically increase as acreages decline. The average annual rate of increase during 1950-71 was 0.1 bushel or about 5% per year. Yields are usually higher in Minnesota and South Dakota than in North Dakota.

Flax Farms Decline While Size Increases

The declining flaxseed economy and shifting acreage patterns have reduced the number of farms growing

Crop yields in tri-State region[1]

Crop	1950	1960	1971	Change 1950-71
	Bushels	*Bushels*	*Bushels*	*Percent*
Flaxseed	9.7	8.9	11.9	23
Oats	31.7	42.9	56.3	78
Barley	23.5	26.7	45.3	93
Corn for grain . .	33.7	46.3	70.9	110
Soybeans for beans	15.2	18.9	22.3	47
Wheat, all	13.1	20.5	32.2	146

[1] Minnesota, North Dakota, and South Dakota.

Harvested acreages in tri-State region[1]

Crop	1950	1960	1971	Change 1950-71
	Million acres	*Million acres*	*Million acres*	*Percent*
Flaxseed	3.6	3.1	1.6	-56
Oats	10.5	8.5	7.3	-30
Barley	4.5	4.8	3.5	-22
Corn for grain . .	7.4	9.6	8.6	16
Soybeans for beans	1.2	2.4	3.3	175
Wheat, all	13.2	9.8	12.8	-3
Total 6 crops .	40.4	38.2	37.1	-8

[1] Minnesota, North Dakota and South Dakota.

Table 15.--Flaxseed: Acreage, supply, and disposition, 1950-72

Year beginning July	Acreage			Yield per acre		Supply					Disposition					
	Planted	Harvested		Planted	Harvested	Production	Stocks, July 1			Total supply	Crushings	Exports	Used for seed		Residual	Total disposition
		Total	Percent				Commercial	CCC	Total				Total 1/	Per acre planted		
	1,000 acres	1,000 acres	Pct.	Bu.	Bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Mil. bu.	Lb.	Mil. bu.	Mil. bu.
1950	4,274	4,090	95.7	9.4	9.8	40.2	3.6	13.4	17.0	57.2	42.3	2.9	2.7	36	-3.0	44.9
1951	4,116	3,904	94.8	8.4	8.9	34.7	9.1	3.2	12.3	47.0	30.2	4.2	2.3	37	-.2	36.5
1952	3,445	3,304	95.9	8.8	9.1	30.2	10.3	0.2	10.5	40.7	25.2	.2	3.2	38	1.1	29.7
1953	4,759	4,570	96.0	7.9	8.2	37.7	5.8	5.2	11.0	48.7	27.8	2.4	3.9	38	.4	34.5
1954	5,947	5,663	95.2	6.9	7.3	41.3	5.4	8.8	14.2	55.5	32.3	8.2	3.4	37	.4	44.3
1955	5,148	4,914	95.4	7.9	8.2	40.4	4.4	6.8	11.2	51.6	34.9	10.4	3.9	37	-1.7	47.5
1956	5,786	5,473	94.6	8.1	8.6	47.0	4.1	2/	4.1	51.2	26.2	2.5	3.6	38	-.5	31.8
1957	5,481	4,793	87.4	4.6	5.2	25.1	5.9	13.5	19.4	44.5	27.3	9.0	2.6	37	-3.1	35.8
1958	3,862	3,679	95.3	9.7	10.2	37.4	5.5	3.2	8.7	46.2	22.4	6.0	2.3	37	.9	31.6
1959	3,268	2,932	89.7	6.5	7.2	21.2	7.7	6.9	14.6	35.9	23.2	8.3	2.4	39	-1.0	32.9
1960	3,437	3,342	97.2	8.8	9.1	30.4	2.9	0.1	3.0	33.4	20.0	7.0	2.1	39	-1.0	28.1
1961	2,975	2,514	84.5	7.5	8.8	22.2	5.3	---	5.3	27.5	19.0	1.5	2.2	39	1.2	23.9
1962	3,102	2,808	90.5	10.4	11.5	32.2	3.6	---	3.6	35.8	21.0	4.3	2.4	39	-.3	27.4
1963	3,379	3,172	93.9	9.2	9.8	31.0	3.1	5.3	8.4	39.4	19.4	3.6	2.1	40	1.3	26.3
1964	2,965	2,825	95.3	8.2	8.6	24.4	2.5	10.6	13.1	37.5	20.8	6.5	2.0	39	-2.7	26.6
1965	2,868	2,775	96.8	12.3	12.8	35.4	8.5	2.4	10.9	46.3	22.7	5.3	1.9	40	1.1	31.0
1966	2,679	2,576	96.2	11.4	9.1	23.4	2.9	12.4	15.3	38.7	19.7	7.5	1.5	40	.7	29.4
1967	2,061	1,975	95.8	9.7	10.1	20.0	4.7	4.6	9.3	29.3	15.9	5.0	1.6	41	-.2	22.3
1968	2,183	2,098	96.1	12.4	12.9	27.1	4.9	2.1	7.0	34.0	14.4	9.7	2.0	41	-1.9	24.2
1969	2,673	2,616	97.9	13.1	13.4	35.1	2.9	6.9	9.8	44.9	14.4	5.7	2.1	42	.9	23.1
1970	3,004	2,888	96.1	10.0	10.4	30.0	2.3	19.5	21.8	51.8	18.9	3.3	1.3	44	1.5	25.0
1971 3/	1,662	1,580	95.1	8.9	11.8	18.7	0.1	26.7	26.8	45.5	21.0	1.9	1.0	43	1.8	25.7
1972 4/	1,289	1,252	97.1	11.7	12.0	15.1	1.1	18.7	19.8	34.9	22	5	1		---	28.0
1973 5/							3	4	7							
1974																
1975																

1/ In the following year. 2/ Less than 50,000 bushels. 3/ Preliminary. 4/ Disposition is forecast. 5/ Forecast.

Table 16.--Flaxseed: CCC price support operations, 1950-72

Year beginning July	Production	Owned by CCC on July 1			Under price support					Price per bushel			
										Level of support			
		Flaxseed	Linseed oil 1/	Total (seed equivalent)	Loans	Purchase agreement	Total	Percent of crop	Flaxseed acquired by CCC	Percent of parity	U.S. farm basis	Minneapolis	Received by farmers
	-- Million bushels --							Percent	Mil. bu.	Percent	-- Dol.--		
1950	40.2	13.4	471.7	37.0	.9	.1	1.0	2.4	2/	60	2.57	2.82	3.34
1951	34.7	3.2	4/521.4	29.2	1.8	.1	1.9	5.4	2/	60	2.65	2.90	3.72
1952	30.2	.2	4/498.6	25.1	3.8	3/1.7	5.5	18.1	4.9	80	3.77	4.03	3.73
1953	37.7	5.2	4/489.5	29.6	15.5	3/3.6	19.0	50.5	17.6	80	3.79	4.05	3.64
1954	41.3	8.8	42.0	10.9	7.3	3.1	10.4	25.1	8.8	70	3.14	3.41	3.05
1955	40.4	6.8	54.7	9.6	7.1	1.5	8.6	20.8	2/	65	2.91	3.19	2.90
1956	47.0	2/	5/	2/	14.6	2.9	17.5	36.4	16.7	70	3.09	3.39	2.99
1957	25.1	13.5	---	13.5	2.5	3/2.0	4.4	17.1	3.5	64	2.92	3.23	2.94
1958	37.4	3.2	---	3.2	12.0	3.2	15.1	39.3	13.1	64	2.78	3.09	2.69
1959	21.2	6/6.9	11.0	7.4	.3	.1	.4	2.0	2/	60	2.38	2.66	3.00
1960	30.4	.1	5/	.1	2.7	.4	3.1	10.1	2/	62	2.38	2.65	2.65
1961	22.2	---	---	---	.8	.1	.9	4.1	2/	74	2.80	3.07	3.26
1962	32.2	---	---	---	5.7	1.3	7.0	21.7	5.9	76	2.90	3.13	2.83
1963	31.0	5.3	---	5.3	11.8	1.1	12.9	41.3	11.2	75	2.90	3.13	2.76
1964	24.4	10.6	53.0	13.2	6.4	---	6.4	25.8	4.0	76	2.90	3.13	2.82
1965	35.4	2.4	80.0	10.3	7.6	3.7	11.3	31.4	9.4	75	2.90	3.15	2.80
1966	23.4	12.4	80.0	16.4	2.3	---	2.3	9.8	1.0	73	2.90	3.15	2.89
1967	20.0	4.6	80.0	8.6	2.7	---	2.7	13.5	1.2	73	2.90	3.15	2.95
1968	27.1	2.1	80.0	6.1	6.2	---	6.2	22.9	5.0	72	2.90	3.16	2.81
1969	35.1	6.9	80.0	10.9	13.1	---	13.1	37.3	12.3	64	2.75	3.01	2.65
1970	30.0	19.5	80.0	23.5	13.9	---	13.9	46.3	13.4	58	2.50	7/	2.40
1971	18.7	26.7	85.6	31.0	6.7	---	6.7	35.8	3.7	57	2.50		2.41
1972 8/	15.1	18.7	144.0	25.9						58	2.50		9/2.60
1973 9/		4	30	5.5									
1974													
1975													

1/ Conversion factor: 20 pounds of linseed oil per 56 pound bushel of flaxseed. 2/ Less than 50,000 bushels. 3/ Includes direct purchase: 1948, 22,680,000 bu.; 1949, 197,000 bu.; 1952, 53,000 bu.; 1953, 749,916 bu.; 1957, 83,114 bu. 4/ Includes 300 million pounds linseed oil (15 million bushels of flaxseed equivalent) transferred to account of Secretary pursuant to his authority under the Defense Production Act of 1950. 5/ Less than 50,000 pounds. 6/ Excludes 1.1 million bushels, resealed in farm storage. 7/ Terminal support rates discontinued. 8/ Preliminary. 9/ Forecast.

flaxseed over the past 2 decades by nearly 75% or some 81,000 farms. But the average size of farms increased from 43 acres in 1949 to 80 in 1969. The value of output per acre fell from $30 to the lower $20's.

These trends likely have continued into the 1970's since flaxseed acreage has continued to drop since 1969.

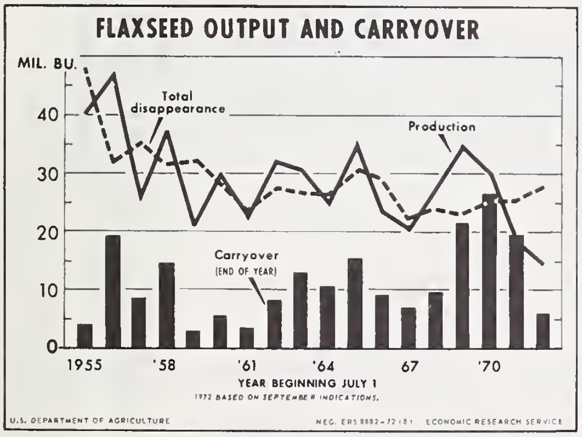
Farms reporting flaxseed[1]

Census year	Number of farms	Average per farm			Value of production per acre
		Acreage harvested	Production	Value of production	
	Thousand	*Acre*	*Bushel*	*Dollars*	*Dollars*
1949	112	43	357	1,296	30
1954	90	57	393	1,196	21
1959	49	59	404	1,230	21
1964	42	63	518	1,453	23
1969	31	80	1,021	N.A.	N.A.

[1] U.S. Census of Agriculture.

Flaxseed Supplies Vary Sharply

U.S. supplies of flaxseed have varied widely over the past 2 decades—from a high of 57 million bushels in 1950 to 28 million in 1961 (table 15). Production fluctuated greatly but trended downward as crushing requirements fell, resulting in wide swings in flaxseed stocks, mostly in government hands. With the exception of 1961 and 1962, CCC carried over flaxseed inventories acquired through the flaxseed price support operations from one crop year to the next. These stocks subsequently were liquidated via government programs—such as domestic toll crush and various export sale schemes.



Flaxseed supplies for the 1972/73 marketing year are estimated at 35 million bushels, 10 million bushels less than a year ago. Stocks owned by CCC totaled about 18 million bushels on July 1 accounting for over half of this year's supply.

Domestic crushings for 1972/73 are estimated at around 22 million bushels (including 7 million CCC toll crush), exports around 5 million bushels, and 1 million for seed. Based on these forecasts, carryover on July 1, 1973, will drop to around 7 million bushels, sharply below recent years and the smallest level since 1968.

CCC Price Support Operations

Price supports for flaxseed are available at the discretion of the Secretary of Agriculture at any level not in excess of 90% of parity. Support prices have been in effect each year since the 1941 flaxseed crop.

Price supports during 1942-49 were made mandatory and set at high levels (160% of parity in 1947) to encourage farmers to produce more flaxseed to meet wartime needs and postwar shortages.

During 1950-72 the level of flaxseed price supports was lower and varied between 80% of parity in 1952 and 1953 and 57% in 1971 (table 16). Throughout this period, large quantities of flaxseed (including linseed oil) were acquired by CCC under the program as market prices averaged near support levels. In some years (especially 1953 and 1970) nearly half of the crop went under price support loan. In the past few years about one-third of the crop has been placed under loan.

CCC acquired about 27 million bushels of flaxseed from the record 1948 crop. The CCC flaxseed was largely crushed for oil during 1948-50. CCC stocks of linseed oil averaged about 500 million pounds on July 1, 1951-53. Included were 300 million pounds set aside for possible needs in connection with the Korean war. During 1953 and 1954 CCC sold about 600 million pounds of oil mainly into export. These sales included 500 million pounds produced in 1948-50 (stored oil) and 100 million produced in 1952-53 (fresh oil).

In 1965 CCC once again acquired large stocks of linseed oil—80 million pounds—under a toll crush program. This oil is still in storage, on a rotating basis. In 1971 CCC started a new toll crush program for flaxseed, and oil stocks climbed further. They reach about 150 million pounds on July 1, 1972, the most since 1953.

In other years when flaxseed was acquired by CCC, the seed was sold mostly into the export market on a competitive bid basis. As of July 1, 1972, CCC owned 18 million bushels of flaxseed but a large part of this has been sold or toll crushed since then.

Over the years CCC has tried various schemes for moving surplus flaxseed and linseed oil into markets.

Table 17.--Flaxseed: Receipts at oil mills, crushings, and stocks end of month, by months, 1957-72

Month	1957/58	1958/59	1959/60	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72: 1/	1972/73: 1/	1973/74
									Receipts at mills								
									-- Thousand bushels --								
July	3,480	1,517	2,718	1,186	1,536	932	1,154	1,939	782	1,200	1,150	822	1,237	1,097	1,603	1,974	
August	3,211	2,777	2,836	1,057	1,571	1,864	2,411	1,743	2,118	3,746	2,086	1,408	1,330	2,108	1,812	1,170	
September	4,073	5,459	3,882	3,564	4,054	4,089	2,368	2,189	3,918	3,928	3,632	2,393	3,520	2,712	2,873		
October	2,817	2,349	3,204	3,614	2,354	3,886	1,575	2,536	2,400	2,507	1,650	2,096	2,244	1,807	1,065		
November	3,241	1,865	1,157	1,618	1,793	1,914	1,593	2,264	1,996	1,986	700	1,718	1,394	1,482	863		
December	1,821	778	2,264	1,443	882	1,332	2,186	2,689	2,386	1,782	1,222	1,528	942	941	1,091		
January	2,159	1,232	1,182	1,536	696	1,343	2,457	1,329	1,014	1,025	1,271	779	1,292	1,269	1,087		
February	1,378	996	1,193	1,486	1,196	1,268	1,664	832	1,871	1,207	1,000	482	627	1,043	1,778		
March	1,004	725	1,279	1,607	1,368	1,464	1,061	1,189	1,482	725	743	614	725	1,500	2,241		
April	964	614	496	1,164	975	889	896	718	2,864	978	724	663	650	1,488	2,514		
May	1,102	3,279	807	1,350	896	1,225	1,732	1,082	2/	721	704	585	1,260	1,365	1,697		
June	1,267	1,000	1,236	1,179	746	1,518	2,096	1,421	964	675	536	1,250	724	2,784	1,704		
Year	26,517	22,591	22,254	20,804	18,067	21,724	21,193	19,931	21,795	20,480	15,418	14,338	15,945	19,596	20,328		
									Crushings								
July	3,055	1,000	1,957	782	1,357	696	386	1,639	804	796	325	479	614	861	1,264	1,660	
August	3,373	1,872	2,918	1,139	1,889	1,368	1,229	1,871	1,857	1,854	1,550	1,079	793	1,456	1,679	2,016	
September	2,981	2,559	2,964	2,161	1,979	2,250	1,861	2,104	2,375	2,157	1,775	1,561	1,957	1,807	1,707		
October	2,730	2,571	3,025	2,257	1,671	2,450	2,057	2,329	2,254	2,207	1,900	1,775	1,536	1,536	1,771		
November	2,373	2,245	1,732	1,914	2,000	1,943	1,761	1,746	1,629	1,871	1,704	1,489	1,371	1,346	1,596		
December	2,069	2,164	1,782	1,296	1,611	1,636	1,571	1,761	1,979	1,461	1,207	1,168	975	1,374	1,686		
January	1,854	2,279	1,850	1,661	1,629	1,889	1,707	1,721	1,864	1,636	1,425	1,361	1,125	1,579	1,886		
February	1,942	1,664	1,654	1,532	1,650	1,539	1,668	1,654	1,846	1,436	1,375	1,171	1,196	1,596	1,818		
March	2,312	1,886	1,629	1,568	1,489	1,789	1,693	1,882	2,082	1,521	1,246	1,182	1,054	1,741	2,218		
April	1,684	1,129	1,446	1,814	1,586	1,725	1,571	1,407	1,764	1,471	1,164	1,007	1,282	1,811	1,805		
May	1,585	1,671	1,086	2,086	1,139	1,804	1,911	1,093	2,036	1,561	1,154	1,071	1,329	1,832	1,585		
June	1,364	1,354	1,175	1,743	1,046	1,921	2,032	1,568	2,225	1,686	1,093	1,057	1,216	2,007	1,966		
Year	27,322	22,394	23,218	19,953	19,046	21,010	19,447	20,775	22,714	19,657	15,918	14,400	14,448	18,946	20,980		
									Stocks, end of month, at oil mills								
July	2,776	2,064	2,500	1,179	1,804	882	2,132	3,411	2,246	1,661	2,632	1,650	1,868	2,979	3,735	3,003	
August	2,615	2,968	2,418	1,096	1,486	1,379	3,314	3,282	2,507	3,239	3,168	1,979	2,405	3,631	3,868	2,157	
September	3,707	5,868	3,336	2,500	3,561	3,218	3,821	3,368	4,050	5,054	5,025	2,811	3,968	4,537	5,033		
October	3,794	5,646	3,514	3,857	4,243	4,654	3,339	3,575	4,196	5,354	4,775	3,132	4,678	4,808	4,327		
November	4,662	5,266	2,939	3,561	4,036	4,629	3,171	4,093	4,564	5,468	3,771	3,361	4,699	4,944	3,594		
December	4,414	3,879	3,421	3,707	3,307	4,325	3,786	5,021	4,971	5,789	3,786	3,721	4,667	4,511	3,000		
January	4,719	2,832	2,754	3,582	2,375	3,779	4,536	4,629	4,121	5,179	3,632	3,139	4,835	4,201	2,202		
February	4,155	2,164	2,293	3,536	1,921	3,507	4,532	3,807	4,171	4,950	3,257	2,450	4,266	3,648	2,162		
March	2,847	1,004	1,943	3,575	1,800	3,182	3,900	3,114	3,571	4,154	2,754	1,882	3,937	3,407	2,186		
April	2,127	489	993	2,925	1,189	2,346	3,225	2,425	3,321	3,661	2,314	1,538	3,305	3,085	2,894		
May	1,644	2,093	714	2,189	946	1,768	3,046	2,414	2,518	2,821	1,864	1,052	3,235	2,619	3,007		
June	1,547	1,739	775	1,625	646	1,364	3,111	2,268	1,257	1,811	1,307	1,245	2,743	3,396	2,688		
Monthly average:																	
Receipts	2,210	1,882	1,854	1,734	1,506	1,810	1,766	1,661	1,816	1,707	1,285	1,195	1,329	1,633	1,694		
Crushings	2,277	1,866	1,935	1,663	1,587	1,751	1,620	1,731	1,893	1,638	1,326	1,200	1,204	1,579	1,748		
Stocks	3,250	3,274	2,300	2,778	2,276	2,919	3,493	3,450	3,458	4,095	3,190	2,330	3,717	3,814	3,225		

1/ Preliminary. 2/ Less than 500 bushels. Compiled from reports of the Bureau of the Census.

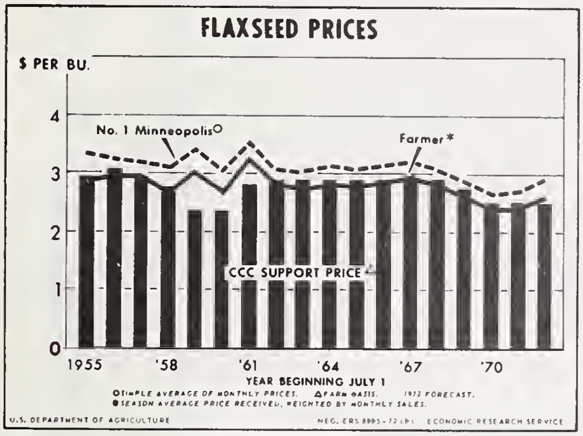
Included were the payment-in-kind program, toll crush program, flaxseed-linseed oil exchange program, barter and export sales of oil to countries other than the EC.

By the end of the 1972/73 marketing year, CCC inventories of flaxseed and linseed oil should be worked down to relatively low levels, since the export prospects for these commodities are favorable.

Flaxseed Prices Trend Downward

Season average prices received by farmers for flaxseed generally trended downward from $3.73 per bushel in 1952 to $2.41 in 1971. Flaxseed supplies sharply in excess of requirements, declining demand and lower prices for linseed oil, and reduced CCC support rates precipitated the severe price drop. In 17 of the past 22 years flaxseed prices have averaged at about the CCC support rate; in 5 years they were significantly above support.

Prices received by farmers for 1972–crop flaxseed are expected to average around $2.60 per bushel, slightly above the support level of $2.50 and the $2.41 received last year. Flaxseed supplies for 1972/73 are a fourth smaller than a year ago and demand appears to be stronger.



Flaxseed Crushings Halved

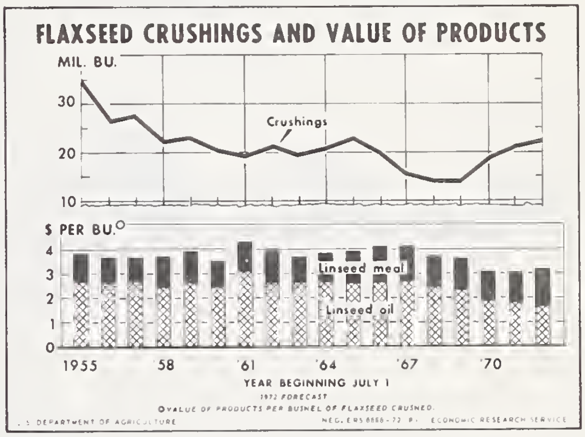
The volume of flaxseed processed by U.S. mills dropped from 42 million bushels in 1950 to 21 million in 1971, reflecting the sharply reduced demand for linseed oil. Crushings fell to 14½ million bushels in 1968 and 1969, the lowest of record. CCC toll crush programs have since boosted the total crush to an estimated 22 million bushels for the current year. During 1950-71 the average annual rate of decline in crushings was 1 million bushels or 2% per year.

In the early 1950's about 25 mills were processing flaxseed. Along with the shrinkage of the market for linseed oil came a gradual reduction in the number of linseed oil processors and processing plants. Last season only 5 mills crushed flaxseed. Of course, today's processing plants are larger and more efficient. Over the years there has been ample processing capacity for flaxseed with large excesses developing in recent years.

Flaxseed Product Value Trends Down

Linseed oil and linseed cake or meal are joint products obtained when flaxseed is crushed. The total value of these products dropped from $5 per bushel in 1950 to $3 last season, reflecting the decline in linseed oil prices (table 18).

Historically, linseed oil has accounted for the major share of the value from a bushel of seed, but its relative importance has declined over the years. In 1950, linseed oil represented 78% of the value of products, and meal 22%. By last season, the oil fraction had declined to 59% while meal's share increased to 41%.



Changes in product values mainly result from changes in relative prices of oil and meal as yields per bushel have remained relatively steady. A bushel of flaxseed (56 pounds) yields 19 to 20 pounds of linseed oil (2½ gallons) and 35 to 37 pounds of linseed meal. The yield of oil varies with the type or variety of flax, climatic conditions under which the crop is grown, and the processing technique utilized.

The total industry value of linseed oil and meal dropped from $187 million in 1950 to $58 million last year.

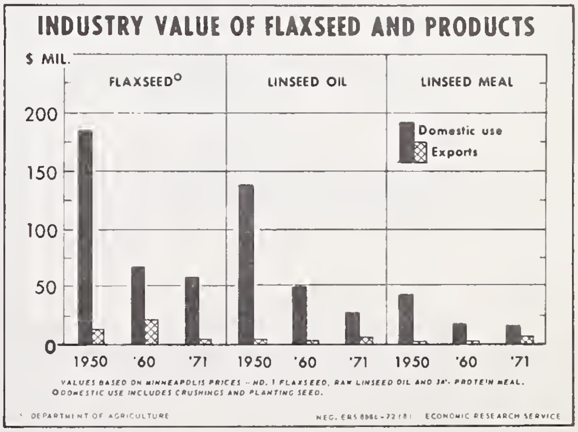


Table 18.--Flaxseed: Yield, price and value of products per bushel of flaxseed crushed and price spread, 1950-72

Year beginning July	Linseed oil			Linseed meal			Total value of oil and meal per bushel	Value as a percentage of total value		Flaxseed price		Spread between value of products and flaxseed price	
	Yield	Price 1/	Value	Yield	Price 1/	Value		Oil	Meal	Farm 2/	No. 1 Minneapolis 3/	Farm	No. 1 Minneapolis
	Lb.	Ct.	Dol.	Lb.	Ct.	Dol.	Dol.	Pct.	Pct.	Dol.	Dol.	Dol.	Dol.
1950	20.0	18.8	3.76	36.4	2.9	1.06	4.82	78	22	3.34	4.06	1.48	.76
1951	20.1	16.7	3.36	36.2	3.3	1.19	4.55	74	26	3.72	4.05	.83	.50
1952	20.1	15.0	3.02	36.5	3.6	1.31	4.33	70	30	3.73	3.98	.60	.35
1953	19.8	14.8	2.93	35.9	3.3	1.18	4.11	71	29	3.64	3.86	.47	.25
1954	19.6	13.6	2.67	36.7	3.1	1.14	3.81	70	30	3.05	3.38	.76	.43
1955	19.9	14.0	2.79	36.8	2.8	1.03	3.82	73	27	2.90	3.37	.92	.45
1956	20.3	13.1	2.66	36.9	2.7	.98	3.65	73	27	2.99	3.28	.66	.37
1957	19.6	14.2	2.78	37.0	2.5	.91	3.69	75	25	2.94	3.21	.75	.48
1958	20.0	12.9	2.58	36.6	3.2	1.16	3.74	69	31	2.69	3.02	1.05	.72
1959	20.0	13.5	2.70	36.7	3.2	1.16	3.86	70	30	3.00	3.41	.86	.45
1960	20.0	12.9	2.58	37.9	2.7	1.01	3.59	72	28	2.65	3.01	.94	.58
1961	20.5	15.2	3.12	37.6	3.2	1.20	4.32	72	28	3.26	3.54	1.06	.78
1962	20.4	13.0	2.65	36.9	3.4	1.25	3.90	68	32	2.83	3.08	1.07	.82
1963	20.2	13.0	2.63	37.1	3.1	1.14	3.77	70	30	2.76	3.05	1.01	.72
1964	20.1	13.7	2.75	36.7	3.0	1.08	3.83	72	28	2.82	3.14	1.01	.69
1965	20.4	12.9	2.63	35.1	3.5	1.24	3.87	68	32	2.80	3.08	1.07	.81
1966	20.6	12.8	2.64	36.9	3.8	1.41	4.05	65	35	2.89	3.17	1.16	.88
1967	20.8	13.1	2.72	36.8	3.8	1.39	4.11	66	34	2.95	3.20	1.16	.91
1968	20.8	12.1	2.48	36.4	3.6	1.29	3.77	66	34	2.81	3.09	.96	.68
1969	20.2	11.9	2.40	35.8	3.4	1.24	3.64	66	34	2.65	2.90	.99	.74
1970	20.2	9.7	1.96	36.3	3.1	1.13	3.09	63	37	2.40	2.66	.69	.43
1971 4/	20.3	8.9	1.81	36.8	3.4	1.25	3.06	59	41	2.41	2.70	.65	.36
1972 5/	20.0	9.5	1.90	36.8	4.1	1.52	3.42	56	44	2.52	2.82	.90	.60
1973													
1974													
1975													

1/ Simple average price per pound using the following Minneapolis prices: raw oil in tank cars; 34 percent protein meal, bulk. 2/ Weighted average. 3/ Simple average. 4/ Preliminary. 5/ July-August average.

Table 19.--Flaxseed: U.S. exports, by country of destination, marketing years 1955-71

Continent and country of destination	Year beginning July																
	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971 2/
	-- 1,000 bushels --																
North America:																	
Canada	1,046	155	1,092	1,168	368	125	1/	1	213	5	1	490	683	1,085	2,495	1,601	---
Mexico	30	1	---	4	39	---	---	---	---	4	34	1	---	6	51	42	1
Other	---	---	---	---	---	---	20	1/	1	---	---	---	---	---	---	1/	---
Total	1,076	156	1,092	1,172	407	125	20	1	214	9	35	491	683	1,091	2,546	1,643	1
South America:																	
Chile	13	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Other	1	1/	2	1/	1/	1/	1/	1/	2	1/	---	---	---	---	---	---	---
Total	14	1/	2	1/	1/	1/	1/	1/	2	1/	---	---	---	---	---	---	---
Europe:																	
Belgium and Luxembourg	2,845	751	874	391	825	993	214	843	647	320	259	942	516	809	219	118	390
France	2,087	390	1,727	627	347	486	71	92	183	453	300	---	26	109	115	41	81
Germany, West	228	---	201	---	41	82	160	340	327	1,411	1,867	2,188	1,257	4,313	1,654	380	802
Italy	36	---	419	164	163	160	---	---	---	---	---	---	---	---	---	---	---
Netherlands	3,345	887	3,264	3,375	4,977	4,426	949	2,631	1,808	3,876	1,597	3,791	2,350	2,430	1,004	1,149	440
Norway	371	101	224	81	176	42	---	---	---	---	---	---	---	---	---	---	---
Switzerland	50	---	41	60	175	152	1/	150	64	317	1,122	53	212	85	67	---	40
United Kingdom	24	---	1,088	97	310	---	---	---	---	---	---	---	---	---	---	---	---
Other	---	---	105	16	188	417	88	236	311	138	90	---	---	899	126	---	151
Total	8,986	2,129	7,943	4,811	7,202	6,758	1,482	4,292	3,340	6,515	5,235	6,974	4,361	8,645	3,185	1,688	1,904
Asia and Oceania:																	
India	43	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Israel	325	263	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Japan	---	---	---	20	674	80	---	---	---	---	---	---	---	---	---	---	---
Other	---	---	---	---	43	1/	---	42	20	---	---	---	---	---	---	---	---
Total	368	263	---	20	717	80	---	42	20	---	---	---	---	---	---	---	---
Grand total	10,444	2,548	9,035	6,005	8,326	6,963	1,502	4,335	3,576	6,524	5,270	7,465	5,044	9,736	5,731	3,331	1,904

1/ Less than 500 bushels. 2/ Preliminary.
SOURCE: Compiled from reports of the Bureau of the Census.

Processing Margin Narrows[2]

Flaxseed processing margins have varied widely during the past 2 decades. From a low of 25 cents per bushel in 1953, the spot margin generally increased to 91 cents in 1967 (table 18). Then it dropped steadily to 36 cents last season. The total value of products dropped more ($1.05 since 1967) than the price of flaxseed (50 cents), putting pressure on the crushing margin. As indicated earlier, the sharp drop in product values reflects the sag in linseed oil prices. When oil prices are relatively high the crusher has a favorable processing margin. Seasonally, margins tend to be higher in the summer months than over the rest of the year.

U.S. Third Largest Exporter

Both flaxseed and linseed oil are important in world trade. U.S. exports of flaxseed have varied considerably over the past 2 decades between 0.2 million and 10 million bushels. They averaged 5½ million bushels annually. In most years exports have been with benefit of Government assistance, since U.S. support prices have been maintained above world market prices. In addition, large quantities of linseed oil were shipped abroad in some years.

In recent years the United States has accounted for about a fifth of world exports of flaxseed (including linseed oil) and is the third largest exporter. Argentina and Canada are the major U.S. competitors, though India and Uruguay are large exporters in some years.

The major U.S. markets for flaxseed are in Western Europe—Netherlands, West Germany, United Kingdom, and France (table 19). Poland has been a large taker of U.S. linseed oil in some years. Just recently, a small but significant sale of linseed oil was made to the Peoples Republic of China.

Tariff Protection

The United States maintains high import duties on flaxseed. Consequently, imports have been negligible. The rate on flaxseed, in effect since June 30, 1949, is 50 cents per bushel and for linseed oil 4.5 cents per pound.

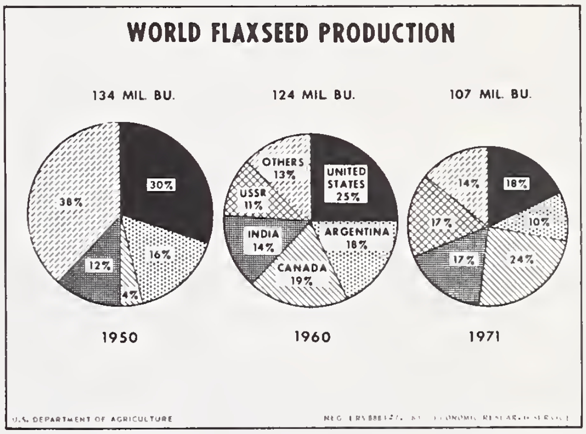
From August 9, 1951, to June 30, 1953, imports of flaxseed (except seed for planting) and linseed oil were embargoed under the provisions of Section 104 of the Defense Production Act of 1950, as amended. Then from July 1, 1953, through May 5, 1961, there was an ad valorem fee of 50% in addition to the regular duty on all imports of flaxseed and linseed oil. This additional fee was imposed under Section 22, Agricultural Adjustment Act of 1933, as amended, to prevent imports from materially interfering with or rendering ineffective the domestic price support program for flaxseed.

U.S. Share of World Production Declines

The United States, Canada, Argentina, the USSR and India produce about 85% of the world's flaxseed. Canada and Argentina export most of their production. India produces for domestic consumption and the USSR is a net importer. The USSR cultivates flax for fiber as well as for seed. The other major producing countries cultivate it almost exclusively for flaxseed.

Since 1950, world flaxseed production has varied from a high of 163 million bushels in 1956 to a low of 91 million in 1967 (table 20). The 1950-71 average was 127 million bushels.

U.S. flaxseed production declined from about one-third of the world total in 1955 to 18% in 1971. During the 1950's our share averaged 28% but fell to 22% in the 1960's. Canada, with 4% of the 1950 world crop, presently contributes about one-fourth.


WORLD FLAXSEED PRODUCTION

U.S. DEPARTMENT OF AGRICULTURE ECONOMIC RESEARCH SERVICE

Argentina formerly produced nearly half of the world flaxseed crop, but lost its lead in World War II. During the 1950's Argentina's contribution was about 16% and in the 1960's 20%. The USSR grew almost one-fourth of the world crop before World War II and presently produces 15 to 20%. India's contribution to world output has been fairly steady during the past 2 decades, averaging around 12%. In 1971 it was about 17%.

World Surplus Disappearing in 1972/73

Export availabilities of flaxseed and linseed oil in 1972/73 in Canada, Argentina, and the United States, which together account for about 90% of world exports, are substantially below the surplus level prevailing last year. Exports of seed and oil were at their highest level since 1967 and this, along with sharply reduced 1971 production, has brought about a much improved balance between world supply and demand. On August 1, 1972, stocks in the 3 major exporting countries totaled the equivalent of an estimated 1.1 million metric tons of seed compared with 1.8 million in 1971—a drop of about two-fifths.

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[2] Spot processing margins are calculated from simple average cash prices using the following Minneapolis quotations: Flaxseed, No. 1 grade; raw linseed oil in tank cars; and 34% protein, bulk linseed meal.

Table 20.--Flaxseed: Estimated world production, by major producing countries, 1950-72 1/

Year	United States		Canada		Argentina		Uruguay		Poland		U.S.S.R. 2/		India		All other countries 3/		World	
	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	Volume	% of world	Volume	Volume 4/
	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Pct.	Mil. bu.	Thou. metric tons
1950	40.2	30.0	4.7	3.5	22.0	16.4	3.7	2.8	---	---	---	---	16.4	12.2	47.2	35.1	134.2	3,409
1951	34.7	28.2	9.9	8.0	12.3	10.0	5.6	4.5	---	---	---	---	14.4	11.7	46.2	37.6	123.1	3,127
1952	30.2	23.5	12.3	9.6	23.0	17.9	4.3	3.4	---	---	---	---	12.6	9.8	46.0	35.8	128.4	3,262
1953	37.7	32.3	9.9	8.5	16.1	13.8	2.5	2.1	---	---	---	---	14.4	12.3	36.0	31.0	116.6	2,962
1954	41.3	34.6	11.2	9.4	15.9	13.3	2.5	2.1	---	---	---	---	15.2	12.7	33.3	27.9	119.4	3,033
1955	40.4	32.9	19.7	16.0	9.4	7.7	2.0	1.6	---	---	---	---	15.3	12.4	36.1	29.4	122.9	3,122
1956	47.0	28.8	35.0	21.5	24.4	15.0	2.8	1.7	---	---	---	---	16.6	10.2	37.1	22.8	162.9	4,138
1957	25.1	21.3	19.2	16.3	24.8	21.1	2.9	2.5	---	---	---	---	15.4	13.1	30.3	25.7	117.7	2,990
1958	37.4	28.7	22.8	17.5	24.4	18.8	2.8	2.2	1.6	1.2	19.8	15.2	10.0	7.7	11.3	8.7	130.1	3,305
1959	21.2	17.6	17.7	14.6	32.5	26.9	2.0	1.7	1.5	1.2	15.6	12.9	17.9	14.8	12.4	10.3	120.8	3,068
1950-59 average	35.5	27.8	16.2	12.7	20.5	16.1	3.1	2.4	5/	5/	5/	5/	14.8	11.6	6/37.4	6/29.3	127.6	3,241
1960	30.4	24.6	23.0	18.6	22.1	17.8	2.6	2.1	1.7	1.4	13.6	11.0	17.2	13.9	13.2	10.6	123.8	3,145
1961	22.2	19.0	15.3	13.1	30.3	25.9	4.0	3.4	---	---	---	---	16.4	14.0	28.7	24.6	116.9	2,969
1962	32.2	24.0	16.0	12.0	33.0	24.7	3.3	2.5	2.6	1.9	---	---	18.0	13.4	28.8	21.5	133.9	3,401
1963	31.0	22.7	21.1	15.4	30.4	22.3	2.4	1.8	2.4	1.8	17.9	13.1	17.0	12.4	14.3	10.5	136.5	3,467
1964	24.4	18.6	20.3	15.4	32.1	24.5	2.8	2.1	2.2	1.7	17.6	13.4	14.9	11.4	16.9	12.9	131.2	3,333
1965	35.4	24.9	29.2	20.5	22.4	15.8	1.5	1.1	3.0	2.1	17.7	12.4	19.8	13.9	13.1	9.3	142.1	3,610
1966	23.4	19.1	22.0	18.0	22.7	18.5	1.6	1.3	2.8	2.3	23.9	19.5	13.2	10.8	12.9	10.5	122.5	3,111
1967	20.0	21.9	9.4	10.3	15.2	16.7	1.1	1.2	2.9	3.2	20.4	22.4	10.2	11.2	12.0	13.1	91.2	2,316
1968	27.1	22.7	19.7	16.5	20.1	16.8	2.2	1.8	2.6	2.2	19.1	16.0	17.2	14.4	11.4	9.6	119.4	3,034
1969	35.1	25.4	27.5	19.9	25.2	18.2	4.1	3.0	2.2	1.6	17.8	12.9	13.0	9.4	13.2	9.6	138.1	3,508
1960-69 average	28.1	22.4	20.4	16.2	25.4	20.2	2.6	2.1	7/2.5	7/2.0	7/18.5	7/14.7	15.7	12.5	7/12.4	7/9.9	125.6	3,190
1970	30.0	18.8	48.9	30.6	26.8	16.8	2.5	1.6	2.6	1.6	18.5	11.5	18.5	11.5	12.1	7.6	159.9	4,060
1971 8/	18.7	17.6	22.4	21.1	12.4	11.7	2.9	2.7	2.2	2.1	18.5	17.4	17.9	16.8	11.4	10.6	106.4	2,702
1972 8/	9/15.1	15.3	18.3	18.6	11.8	12.0	2.9	2.9	2.2	2.2	18.5	18.8	18.3	18.6	11.4	11.6	98.5	2,500
1973																		
1974																		
1975																		

1/ Main harvesting periods are as follows:
United States--August-September
Canada--September-October
Argentina--December
Uruguay--December
U.S.S.R.--August-September
India--February-April
Other countries--Mostly September-October.
2/ Europe and Asia. Includes seed from fiber flax.
3/ In recent years mainly includes Mexico, Brazil, France, Czechoslovakia, Hungary, Romania, Egypt, Pakistan, Australia and New Zealand.
4/ Metric ton of flaxseed equal to 39.368 bushels.
5/ Included in "All other countries".
6/ Includes Poland and U.S.S.R.
7/ Less than 10-year average.
8/ Preliminary.
9/ September crop estimate.

SOURCE: Compiled from annual Foreign Agriculture Circulars on flaxseed.

Linseed Oil Uses

In the United States linseed oil is used extensively as a "drying oil vehicle" in the manufacture of paints, varnishes, lacquers, enamels, oilcloth, linoleum, oil clothing, tarpaulins and tenting, patent leather, textiles, printing inks, foundry core oil, soap, shoe polish, and numerous other specialty products. It is also used for "splitting" to produce glycerine and fatty acids for further chemical processing.

In Eastern Europe and Asia linseed is used extensively as an edible oil. During World War II the United States shipped large quantities of linseed oil to the USSR to supplement its short food fats and oil supplies. More than half of India's production went to food uses in the early 1950's, but now only about one-third.

U.S. Linseed Oil Supplies Increasing Again

Domestic supplies of linseed oil dropped from 1.4 billion pounds in 1950 (when CCC held a half billion pounds) to 0.4 billion in 1969 (table 21). Supplies have again built up—aided by the CCC toll-crush program—and are estimated at 0.7 billion pounds for the current marketing year. Historically, surplus stocks of linseed oil have been held by CCC as the trade typically carries over around 100 million pounds (equivalent to 5 million bushels of flaxseed).

As the demand for linseed oil fell, output dropped from 844 million pounds in 1950 to 426 million in 1971. The average annual rate of decline was 20 million pounds (equivalent to 1 million bushels of seed) or about 2% per year. Total utilization of the oil also declined at about the same rate. The loss of markets was greater in the 1950's than during the 1960's.

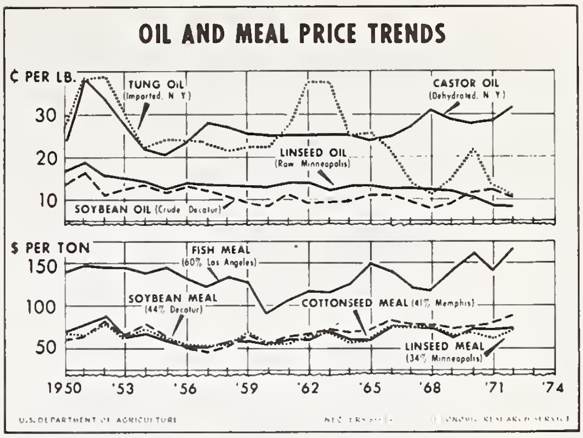
Oil Prices Lowest Since Early 1930's

Linseed oil prices (raw, Minneapolis) generally trended downward from 19 cents per pound in 1950 to 9 cents in 1971. The average annual rate of decline was half a cent per pound or about 3% per year. Last season's price was the lowest since the 6 cents-per-pound level in 1932. The highest price of record—an average 34 cents per pound—was reached shortly after World War II when all fats and oils supplies were short. Linseed oil prices so far this year have averaged 9½ cents. Linseed oil's declining price level has reflected the reduced demand from the drying oil industries. However, the recent low price level seems to have encouraged some expansion in linseed oil use this past year.

Drying oils traditionally competitive with linseed are tung, fish, castor, and oiticica. However, soybean oil and tall oil have penetrated the drying oils market since World War II.

Linseed Still Major Drying Oil

Domestic disappearance of linseed oil dropped from 728 million pounds in 1950 to 286 million in 1971. The low point in consumption—250 million pounds—was reached in 1969 and 1970 (table 22). The average annual rate of decline during 1950-71 was 22 million pounds or 4% annually. About 95% of linseed oil used domestically goes into drying oil products.



Total fats and oils used directly in drying oil products dropped from a record 1.2 billion pounds in 1950 to 0.6 billion last year.[3] In 1950 linseed contributed over half of total oils used in drying oil products. In recent years it has supplied about two-fifths to a 50% smaller market (table 23). In 1971, the 625 million pounds of oil used in all drying oil products were distributed as follows: linseed oil, 44%; soybean oil, 24%; tall oil, 11%; castor oil, 5%; tung and fish oils, each 4%; and all others, 8%;

Linseed oil lost much of its former market as new vehicles for protective coatings were developed—some modified vegetable oils and others synthetic. Several factors aided the rapid development of new vehicles as linseed replacement. Technological developments in the application of protective coatings by the consuming industries demanded faster drying and longer life for protective finishes. Also, linseed oil prices in most years were too high to be competitive with most other drying and semi-drying oils or other replacement synthetic vehicles. Because of the wide swings in linseed oil prices—caused by war, crop failures and government actions—more stable-priced vehicles were demanded.

Surface Coatings Production Increasing; Oil Use Per Gallon At Low Level

U.S. production of paint, varnish, and lacquers increased from 0.6 billion gallons in the early 1950's to 0.9 billion last year. Output for 1972 is projected to hit a record 1 billion gallons (table 24). During January-June it totaled 482 million gallons, some 12% ahead of 1971.

During 1950-71, the direct use of fats and oils per gallon of coatings fell from 1½ pounds to about ½ pound—half of which is linseed oil. At the same time,

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[3] The Census data excludes fats and oils used in fatty acids, many of which are used in drying oil products. This tends to understate the volume of fats and oils used by the drying oil industry, especially for tall oil.

Table 21.--Linseed oil: Supply, disposition, oil equivalent of flaxseed exports, and price, 1950-72

Year beginning July	Supply							Disposition			Flaxseed (oil equivalent of exports) 1/	Price per pound, raw Minneapolis
	Flaxseed crushed			Stocks, July 1			Total supply	Exports and shipments	Domestic disappearance	Total disposition		
	Total crush	Linseed oil production		Commercial	CCC	Total						
		Per bushel	Total									
	Mil. bu.	Lbs.					-- Million pounds --					Cents
1950	42.3	20.0	844	116	472	588	1,432	26	728	754	57	18.8
1951	30.2	20.1	609	158	2/521	679	1,288	28	585	613	83	16.7
1952	25.2	20.1	507	176	2/499	675	1,182	3	559	562	4	15.0
1953	27.8	19.8	551	129	2/490	619	1,162	303	522	825	47	14.8
1954	32.3	19.6	632	303	42	345	977	318	521	839	162	13.6
1955	34.9	19.9	695	84	55	139	834	140	552	692	207	14.0
1956	26.2	20.3	532	142	---	142	674	78	497	575	51	13.1
1957	27.3	19.6	535	99	---	99	634	87	435	522	181	14.2
1958	22.4	20.0	448	112	---	112	560	8	455	463	125	12.9
1959	23.2	20.0	465	86	11	97	563	55	418	473	166	13.5
1960	20.0	20.0	399	90	---	90	489	24	370	394	139	12.9
1961	19.0	20.5	391	94	---	94	485	2	378	380	30	15.2
1962	21.0	20.4	428	105	---	105	533	9	394	403	87	13.0
1963	19.4	20.2	394	131	---	131	524	14	3/388	402	72	13.0
1964	20.8	20.1	418	91	53	3/144	557	20	344	364	130	13.7
1965	22.7	20.4	463	118	80	198	661	84	336	420	105	12.9
1966	19.7	20.6	405	161	80	241	646	121	329	450	149	12.8
1967	15.9	20.8	331	116	80	196	527	53	273	326	101	13.1
1968	14.4	20.8	300	121	80	201	501	77	4/275	352	197	12.1
1969	14.4	20.2	292	51	80	131	423	43	252	295	116	11.9
1970	18.9	20.2	382	49	80	129	511	53	254	307	67	9.7
1971 5/	21.0	20.3	426	118	86	204	630	66	286	352	38	8.9
1972 6/	22.0	20.0	440	133	144	277	717	250	290	540	100	7/9.5
1973 6/				147	30	177						
1974												
1975												

1/ Based on 20 pounds of linseed oil per bushel of flaxseed exported. 2/ Includes 300 million pounds linseed oil (15 million bushels of flaxseed equivalent) transferred to account of Secretary pursuant to his authority under the Defense Production Act of 1950. 3/ Factory consumption figures used for years in which reported factory consumption exceeds calculated domestic disappearance. 4/ Estimate based on reported factory consumption. 5/ Preliminary. 6/ Forecast. 7/ July-September average.

Table 22.--Linseed oil: Utilization, by products, 1950-71

Year beginning July	Drying oil products					Lubricants and similar oils	Fatty acids	Foots and loss	Other	Domestic disappearance	
	Paint and varnish	Linoleum and oilcloth	Resins and plastics	Other	Total					Total	Per capita
	-- Million pounds --										Pounds
1950	526	107	27	42	702	---	---	7	18	728	4.8
1951	415	86	23	43	566	---	---	10	9	585	3.8
1952	403	93	14	32	541	---	---	14	5	559	3.6
1953	386	76	13	29	504	---	---	11	7	522	3.3
1954	368	69	19	45	501	---	---	11	10	521	3.2
1955	393	66	21	49	530	---	---	13	9	552	3.4
1956	376	47	18	35	476	---	---	10	11	497	3.0
1957	342	29	14	32	418	---	---	11	6	435	2.5
1958	371	31	16	22	441	3	3	5	3	455	2.6
1959	343	30	22	12	408	4	5	---	1	418	2.4
1960	309	22	19	11	361	4	5	---	1/	370	2.1
1961	317	22	18	10	367	4	7	---	---	378	2.1
1962	343	14	20	11	388	3	3	---	---	394	2.1
1963	338	14	19	10	381	2	4	---	---	2/388	2.1
1964	294	14	22	8	338	3	3	---	---	344	1.8
1965	283	14	19	8	324	5	7	---	1/	336	1.7
1966	278	14	21	11	324	6	1/	---	---	329	1.7
1967	227	10	19	11	267	4	1	---	---	273	1.4
1968	223	20	20	10	273	1	1	---	---	3/275	1.4
1969	197	13	19	10	239	10	3	---	---	252	1.2
1970	202	8	19	10	239	13	2	---	---	254	1.2
1971 4/	231	8	21	9	269	14	3	---	---	286	1.4
1972											
1973											
1974											
1975											

1/ Less than 500,000 pounds. 2/ Factory consumption figures used for years in which reported factory consumption exceeds domestic disappearance. 3/ Estimate based on reported factory consumption. 4/ Preliminary.

Table 23.--Fats and oils used in drying oil products, by kind of oil, actual and percentage distribution, 1950-72 1/

Calendar Year	Linseed oil	Soybean oil	Tung oil	Fish oil	Castor oil	Oiticica oil	Tall oil	Other fats and oils	Total
					-- Million pounds --				
1950	590	213	109	33	66	12	70	84	1,178
1951	665	194	61	28	38	12	84	69	1,151
1952	536	209	51	36	41	11	87	61	1,033
1953	536	242	51	34	39	10	93	82	1,086
1954	498	209	48	23	38	8	116	76	1,017
1955	504	226	51	33	63	12	123	113	1,125
1956	513	194	51	32	73	11	146	87	1,107
1957	437	191	48	33	79	11	128	106	1,032
1958	427	158	41	30	64	10	111	93	934
1959	448	184	46	21	83	9	84	48	2/924
1960	351	172	38	49	85	15	86	38	833
1961	365	163	38	73	75	7	96	38	855
1962	374	166	32	70	77	16	104	37	876
1963	382	179	31	22	83	5	105	48	855
1964	372	188	31	41	111	10	102	47	902
1965	328	208	34	80	107	8	117	27	909
1966	310	214	33	130	89	8	114	25	923
1967	315	192	37	65	92	1	107	50	859
1968	251	193	38	122	89	11	109	56	868
1969	271	191	31	63	61	12	88	21	738
1970	230	167	28	29	48	4	75	47	627
1971 3/	276	148	23	28	32	3	71	44	625
1972 4/	275	145	30	35	75	5	70	25	660
1973									
					-- Percent --				
1950	50.1	18.1	9.3	2.8	5.6	1.0	5.9	7.1	100
1951	57.8	16.9	5.3	2.4	3.3	1.0	7.3	6.0	100
1952	51.9	20.2	4.9	3.5	4.0	1.1	8.4	5.9	100
1953	49.4	22.3	4.7	3.1	3.6	0.9	8.6	7.5	100
1954	49.0	20.6	4.7	2.3	3.7	0.8	11.4	7.5	100
1955	44.8	20.1	4.5	2.9	5.6	1.1	10.9	10.0	100
1956	46.3	17.5	4.6	2.9	6.6	1.0	13.2	7.9	100
1957	42.3	18.5	4.6	3.2	7.7	1.1	12.4	10.3	100
1958	45.7	16.9	4.4	3.2	6.8	1.1	11.9	10.0	100
1959	48.5	19.9	5.0	2.3	9.0	1.0	9.1	5.2	100
1960	42.1	20.6	4.6	5.9	10.2	1.8	10.3	4.5	100
1961	42.7	19.1	4.4	8.5	8.8	0.8	11.2	4.5	100
1962	42.7	18.9	3.7	8.0	8.8	1.8	11.9	4.2	100
1963	44.7	20.9	3.6	2.6	9.7	0.6	12.3	5.6	100
1964	41.3	20.9	3.4	4.5	12.3	1.1	11.3	5.2	100
1965	36.1	22.9	3.7	8.8	11.8	0.9	12.9	2.9	100
1966	33.6	23.2	3.6	14.1	9.6	0.9	12.3	2.7	100
1967	36.7	22.3	4.3	7.6	10.7	0.1	12.5	5.8	100
1968	28.9	22.2	4.4	14.0	10.3	1.3	12.5	6.4	100
1969	36.7	25.9	4.2	8.5	8.3	1.6	11.9	2.9	100
1970	36.7	26.6	4.5	4.6	7.6	0.6	12.0	7.5	100
1971 3/	44.1	23.7	3.7	4.5	5.1	0.5	11.4	7.0	100
1972 4/	41.6	22.0	4.5	5.3	11.4	0.8	10.6	3.8	100
1973									

1/ Includes paints, varnishes, enamels, resins, plastics, linoleum and other floor coverings, oil cloth, printing inks, core oils, insulation, linings, packings, coated fabrics, caulking compounds and other protective coatings. 2/ Beginning 1959, excludes fats and oils used in fatty acids, many of which are used in drying oil products. 3/ Preliminary. 4/ Forecast.

Table 24.--Surface coatings: Production and fats and oils used, 1950-72

Calendar year	Production of paint, varnish and lacquer			Fats and oils used		Linseed oil used			Percentage change from preceding year	
	Total 1/	Trade sales products 2/	Industrial product finishes 3/	Total 4/	Per gallon	Total 4/	Per gallon	% of total fats and oils used	Total production of PVL	Total fats and oils used
	-- Mil. gal. --			Mil. lb.	Lb.	Mil. lb.	Lb.		-- Percent --	
1950	641	5/	5/	873	1.4	437	0.7	50	22	19
1951	590	5/	5/	887	1.5	483	.8	54	-8	2
1952	583	5/	5/	809	1.4	411	.7	51	-1	-9
1953	665	420	179	868	1.3	417	.6	48	14	7
1954	636	416	170	815	1.3	396	.6	48	-4	-6
1955	721	515	252	842	1.2	375	.5	45	13	3
1956	695	503	239	858	1.2	416	.6	48	-4	2
1957	648	518	244	795	1.2	364	.6	46	-7	-7
1958	595	321	274	731	1.2	367	.6	50	-8	-8
1959	650	346	304	791	1.2	399	.6	50	9	8
1950-59 average	642	6/434	6/237	827	1.3	406	.6	49	3	1
1960	663	344	319	716	1.1	315	.5	44	2	-9
1961	623	329	294	744	1.2	329	.5	44	-6	4
1962	643	337	306	763	1.2	342	.5	45	3	3
1963	678	373	305	727	1.1	363	.5	50	5	-5
1964	725	394	330	786	1.1	318	.4	40	7	8
1965	775	411	365	790	1.0	308	.4	39	7	1
1966	837	416	421	810	1.0	291	.3	36	8	3
1967	782	398	383	740	.9	288	.4	39	-7	-9
1968	843	424	419	747	.9	221	.3	30	8	1
1969	880	430	450	623	.7	250	.3	40	4	-17
1960-69 average	745	386	359	745	1.0	303	.4	41	3	-2
1970	827	428	399	534	.6	210	.3	39	-6	-14
1971 7/	874	431	444	540	.6	260	.3	48	6	1
1972 8/	1,000	475	525	575	.6	265	.3	46	14	6
1973										
1974										
1975										

1/ Bureau of the Census. 2/ Census defines trade products as "stock type" shelf goods normally distributed through wholesale--retail channels and purchased by painters and others for general application on new construction or for general maintenance. 3/ Census defines industrial finishes as those formulated to meet conditions of application and use of the product to which applied and are generally applied as part of the manufacturing process. Industrial finishes also include coatings specially formulated for industrial maintenance use requiring protection against extreme temperatures, fungi, chemicals, fumes, etc. 4/ Includes an estimated 90-95% of the oil listed by Census as used in synthetic resins which end up in protective coatings. 5/ Not available. 6/ Less than 10-year average. 7/ Preliminary. 8/ Forecast.

Table 25 .--Wholesale price per pound of fats and oils used in drying oil products, and index numbers, 1950-72

Calendar year	Linseed oil, raw (Minneapolis)	Soybean oil, crude (Decatur)	Tung oil, imported (New York)	Fish oil, crude 1/ (Baltimore)	Castor oil, dehydrated (New York)	Oiticica oil (New York)	Tall oil, refined (works)	Index numbers of drying oils (1967=100)
	-- Cents per pound, tanks --							Number
1950	16.5	14.0	25.5	8.7	24.0	2/20.2	5.1	123.7
1951	18.9	16.8	38.4	14.0	38.7	28.6	5.8	161.7
1952	15.9	11.0	38.8	7.2	34.0	23.9	5.2	140.1
1953	15.0	12.4	27.7	6.9	27.7	21.9	5.0	123.0
1954	14.6	13.3	22.4	7.8	21.8	16.5	5.0	112.3
1955	12.9	11.6	24.3	8.2	20.5	13.6	5.2	99.3
1956	14.1	13.2	24.3	8.8	23.8	15.0	5.2	111.0
1957	13.6	12.2	23.2	8.9	28.2	17.2	5.5	116.0
1958	13.8	10.5	21.3	8.0	27.3	16.7	5.5	110.2
1959	13.1	9.0	22.8	7.4	25.1	19.9	5.5	104.2
1950-59 average	14.8	12.4	26.9	8.6	27.1	19.4	5.3	120.2
1960	13.1	8.8	22.3	6.5	25.0	15.1	5.3	103.5
1961	14.2	11.5	27.7	6.2	25.0	14.1	7.1	118.2
1962	14.2	9.0	37.4	4.6	25.1	16.9	7.5	116.0
1963	12.7	8.9	37.4	6.2	25.1	28.4	7.5	110.0
1964	13.4	9.2	25.0	8.7	25.1	20.0	7.5	104.0
1965	13.4	11.2	25.8	9.2	24.6	21.6	7.5	109.4
1966	12.8	11.6	21.0	9.4	25.0	19.2	7.5	106.8
1967	12.9	9.6	14.4	7.3	27.3	17.0	7.5	100.0
1968	12.7	8.2	11.8	5.0	31.4	10.4	7.5	94.4
1969	12.0	9.1	15.1	4.5	29.0	12.6	7.5	91.3
1960-69 average	13.1	9.7	23.8	6.8	26.3	17.5	7.2	105.4
1970	11.0	12.0	22.3	2/7.1	28.0	16.5	8.2	102.4
1971	8.9	12.6	13.8	9.4	28.4	16.3	8.5	95.2
1972 3/	9.1	11.0	11.2	7.2	29.9	15.8	8.5	93.8
1973								
1974								
1975								

1/ Menhaden oil.
2/ Average for less than 12 months.
3/ January-August average.

Table 26.--Linseed oil: U.S. exports, by country of destination, marketing years 1955-71 1/

Continent and country of destination	Year beginning July																
	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971 2/
	-- 1,000 pounds --																
North America:																	
Canada	5,024	988	157	286	1,027	216	283	526	760	569	885	627	469	804	591	802	508
Cuba	972	1,303	2,257	897	668	31	---	---	---	---	---	---	---	---	---	---	---
Mexico	502	64	158	147	103	140	169	245	199	1,959	3,712	308	229	5,940	633	247	96
Panama	9	13	16	---	1	22	5	6	3	---	2	9	8	3	---	---	3
Total 3/	6,563	2,392	2,626	1,373	1,879	496	509	823	1,030	2,549	4,626	964	738	6,778	1,246	1,061	626
South America:																	
Bolivia	30	16	6	---	---	---	---	---	---	---	---	---	---	---	---	---	23
Chile	81	4	8	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Colombia	493	747	574	247	225	206	267	297	192	129	66	68	4	---	12	---	---
Ecuador	13	10	24	7	---	4	1	---	2	---	---	7	---	---	---	---	---
Peru	66	53	6	---	---	2	6	20	12	40	39	19	15	26	12	13	---
Venezuela	242	351	392	250	117	96	108	73	222	184	426	446	248	318	335	362	411
Total 3/	925	1,181	1,010	504	344	310	382	426	444	353	535	561	289	360	383	384	444
Europe:																	
Belgium and Luxembourg	7,522	7,106	---	8	---	---	---	---	---	---	---	22	2	2	2	---	46
Germany-West	16,549	4,017	1,112	2	5	5	---	5	---	11	11	9	97	212	395	26	---
Italy	663	43	---	10	1	28	44	68	43	58	---	35	146	941	183	226	75
Netherlands	46,139	41,109	45,348	5,715	28,252	18,821	---	7,237	6,916	15,993	48,912	94,724	42,569	56,677	9,939	20,955	6,848
Poland	---	---	---	---	---	---	---	---	---	---	---	---	---	---	7,973	20,564	28,598
Spain	613	4,422	---	31	11	1	11	---	6	5	3	---	---	---	---	---	---
Switzerland	806	1,144	---	---	9,480	26	---	---	---	---	---	---	---	---	---	---	---
United Kingdom	55,854	12,655	32,373	---	9,529	2,415	42	9	5,470	6	28,591	22,431	7,822	8,640	19,279	9,071	15,885
Total 3/	128,254	70,496	79,459	5,848	52,208	21,326	141	7,342	12,539	16,274	77,557	117,249	50,667	66,500	37,836	50,851	59,045
Africa	---	746	16	---	2	6	4	45	192	22	768	1,904	32	2,322	3,327	---	2,226
Asia:																	
Japan	---	231	---	1	---	31	62	37	41	11	8	15	35	28	16	38	3,374
Korea, South	297	577	1,030	5	6	8	53	---	52	574	48	---	---	---	53	---	2
Pakistan	2,528	594	---	---	3	---	---	---	---	---	---	---	---	---	---	---	110
Philippines	1,021	1,381	1,798	340	206	421	508	83	47	118	50	55	114	106	75	58	46
Total 3/	3,924	3,219	2,992	448	335	570	633	125	172	732	137	95	185	341	210	188	3,577
Australia	5	---	1,039	---	---	928	---	1	3	9	58	73	255	663	3	3	6
Grand total 3/	139,672	78,034	87,152	8,176	4/54,949	23,640	1,683	8,770	14,382	19,949	83,702	120,849	52,171	76,966	43,006	52,487	65,926

1/ Includes raw linseed oil (Census code 422.1000) and processed linseed oil (boiled, blown, dehydrated; Census code 431.1010). 2/ Preliminary. 3/ Includes other countries not shown separately above. 4/ Includes 179,000 pounds whose destination is not indicated. SOURCE: Compiled from reports of the Bureau of the Census.

Table 27.--Oilseed and fish meals: Wholesale price per ton at specified markets and index numbers, 1950-72

Calendar year	Linseed meal (34% protein, Minneapolis)	Cottonseed meal (41% protein, Memphis)	Peanut meal (50% protein, S.E. mills)	Soybean meal (44% protein, Decatur)	Copra meal (20% protein, Los Angeles)	Safflower meal (20% protein, San Francisco)	Fish meal (60% protein, sacked, Los Angeles)	Index numbers of oilseed meals (1967=100) 1/	Linseed meal price as a percent of					
									Cottonseed	Peanut	Soybean	Copra	Safflower	Fish
	-- Dollars per ton, bulk --							Number	-- Percent --					
1950	67.50	68.25	69.20	64.20	65.30	---	139.70	84	99	98	105	103	---	48
1951	66.50	78.80	74.00	67.90	73.60	---	148.50	102	84	90	98	90	---	45
1952	79.15	89.00	91.75	83.80	88.70	---	144.80	87	89	86	94	89	---	55
1953	68.55	65.30	70.75	64.30	77.75	---	145.35	91	105	97	107	88	---	47
1954	70.95	69.30	81.65	79.70	66.60	---	138.85	78	102	87	89	106	---	51
1955	63.90	60.40	69.40	56.85	72.15	---	145.90	70	106	92	112	88	---	44
1956	52.50	51.80	51.60	51.30	65.95	---	131.30	67	101	102	102	80	---	40
1957	49.80	50.85	45.95	47.05	59.95	---	123.65	72	98	108	106	83	---	40
1958	53.85	58.55	58.45	55.95	65.00	---	134.20	76	92	92	96	83	---	40
1959	69.30	60.10	58.05	56.45	77.95	---	129.85	74	115	119	123	89	---	53
1960	55.30	54.25	53.50	53.10	71.10	30.00	92.50	78	102	103	104	78	184	60
1961	55.80	57.75	59.25	63.15	64.30	29.70	106.95	83	97	94	88	87	188	52
1962	69.40	61.10	63.70	66.50	77.80	30.50	116.70	92	114	109	104	89	228	59
1963	65.80	67.70	67.70	72.50	80.75	35.90	115.20	91	97	97	91	81	183	57
1964	56.50	60.25	61.65	69.15	73.95	29.80	123.60	90	94	92	82	76	190	46
1965	64.10	60.10	70.10	71.45	80.50	30.75	150.30	103	107	91	90	80	208	43
1966	77.10	76.70	83.20	83.80	84.65	35.25	144.50	102	101	93	92	91	219	53
1967	72.75	76.85	79.55	76.45	80.50	31.05	123.05	100	95	91	95	90	234	59
1968	75.90	74.95	83.05	77.45	82.65	29.75	120.05	96	101	91	98	92	255	63
1969	67.70	66.00	77.10	74.50	75.40	35.40	142.40	103	102	88	91	90	191	48
1970	67.15	73.80	82.05	79.20	79.20	40.65	164.10	103	91	82	85	85	165	41
1971	62.40	72.05	75.20	77.85	80.00	40.25	141.70	102	87	83	80	78	155	44
1972 2/	73.95	76.20	89.30	93.20	80.00	36.25	145.35	120	97	83	79	92	204	51

1/ Includes linseed, cottonseed, peanut, soybean and copra meals. 2/ January-August average.

Table 28.--Linseed cake and meal: Supply, disposition, meal equivalent of flaxseed exports, and price, 1950-72

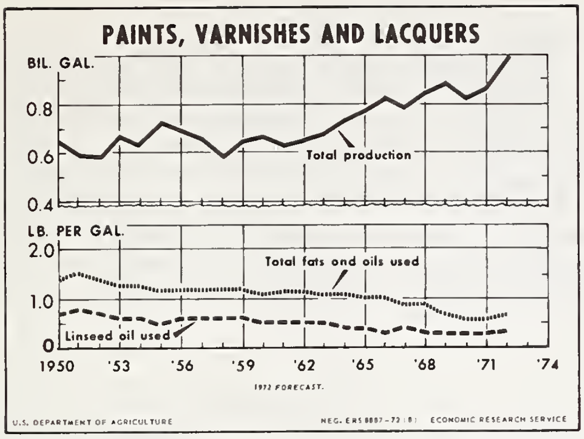
Year beginning July	Supply						Disposition				Flaxseed (meal equivalent of exports) 3/	Price per ton, bulk, 34% protein Minneapolis
	Flaxseed crushed			Imports	Stocks, July 1 1/	Total supply	Exports and shipments	Domestic disappearance		Total disposition		
	Total crush	Linseed meal production						Total	Per high protein animal (livestock) unit 2/			
		Per bushel	Total									
	Mil. bu.	Lbs.		-- 1,000 tons --					Lbs.	-- 1,000 tons --		Dol.
1950	42.3	36.4	770	1	26	797	15	743	21	758	53	58.70
1951	30.2	36.2	547	5	39	591	22	540	15	562	77	65.10
1952	25.2	36.5	460	44	29	533	4/	513	15	513	4	72.90
1953	27.8	35.9	500	1	20	521	12	484	14	496	44	65.30
1954	32.3	36.7	592	---	25	617	66	528	15	594	150	61.40
1955	34.9	36.8	643	---	22	667	145	484	14	629	190	55.00
1956	26.2	36.9	484	5	36	525	76	433	12	509	46	53.15
1957	27.3	37.0	505	6	16	527	12	491	15	503	164	49.00
1958	22.4	36.6	409	7	24	440	14	416	12	430	110	63.65
1959	23.2	36.7	426	2	10	438	67	325	9	393	152	62.95
1960	20.0	37.9	378	2	46	426	39	362	10	401	128	53.35
1961	19.0	37.6	358	2	25	385	16	359	10	375	27	62.70
1962	21.0	36.9	388	1	10	399	54	324	9	378	79	67.50
1963	19.4	37.1	360	1	21	382	33	325	9	358	66	61.20
1964	20.8	36.7	381	1	24	406	80	306	9	386	119	59.08
1965	22.7	35.1	398	1	20	419	115	289	8	404	97	70.53
1966	19.7	36.9	363	6	15	384	111	245	7	356	137	76.36
1967	15.9	36.8	293	4/	28	321	92	214	6	306	91	75.49
1968	14.4	36.4	262	1	16	279	86	181	5	267	177	71.08
1969	14.4	35.8	258	2	13	273	75	180	5	255	104	69.05
1970	18.9	36.3	344	2	18	364	94	260	7	354	60	62.10
1971 5/	21.0	36.8	385	3	9	397	117	271	7	388	35	67.80
1972 6/	22.0	36.5	400	3	9	412	120	285	7	405	91	7/83.50
1973 6/					7							

1/ Stocks at processors mills. 2/ Based on high-protein animal (livestock) units shown in Statistical Bulletin No. 489, U.S. Fats and Oils Statistics, table 212 (July 1972). 3/ Based on 36.5 pounds of linseed meal per bushel of flaxseed exported. 4/ Less than 500 tons. 5/ Preliminary. 6/ Forecast. 7/ July-September average.

Table 29.--Linseed cake and meal: U.S. exports, by country of destination, marketing years, 1955-71

Continent and country of destination	Year beginning July																
	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971 1/
	-- Tons --																
North America:																	
Barbados	1,591	566	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Canada	25,428	7,752	718	310	1,012	700	130	632	73	250	1,011	59	63	50	---	---	48
Mexico	10	---	---	---	---	---	---	---	18	---	135	6	---	---	145	76	6
Panama	30	---	20	---	---	---	---	---	---	---	50	---	---	---	496	---	---
Trinidad	1,249	466	---	162	264	252	268	250	70	---	35	---	---	---	---	---	---
Total 2/	28,394	8,834	748	477	1,276	1,037	398	882	161	254	1,231	88	68	56	646	81	54
South America:																	
British Guiana	80	344	---	---	21	---	---	---	---	---	---	---	---	---	---	---	---
Peru	---	---	---	---	---	---	---	---	---	---	---	---	9	---	---	20	---
Venezuela	33	---	---	---	---	---	---	---	---	---	---	---	---	8	---	6	28
Total 2/	184	354	20	12	98	6	---	6	---	50	---	---	9	8	---	26	28
Europe:																	
Belgium and Luxembourg	13,360	7,125	1,000	---	620	336	---	118	913	1,989	2,014	680	---	---	---	---	---
Denmark	5,484	7,261	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Finland	12,643	---	---	---	---	---	---	---	---	---	---	386	---	---	---	---	---
France	3,851	---	---	1,614	---	533	---	867	1,245	4,026	8,654	3,483	4,935	2,628	4,034	4,423	6,011
Germany, West	9,710	10,645	907	5,329	9,069	4,027	893	1,177	1,123	14,588	53,788	38,324	30,550	4,007	27,537	70,505	63,191
Ireland	266	30	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Italy	602	55	---	---	1,207	---	---	---	---	220	---	22	---	---	---	---	---
Netherlands	62,412	36,952	8,797	6,962	53,475	32,915	14,832	47,457	28,593	55,101	41,446	32,527	20,638	76,372	33,529	16,415	44,273
Poland	---	---	---	---	---	---	---	---	---	---	---	6,039	7,456	---	2,326	---	1,672
Spain	---	---	---	---	---	---	---	1,039	---	78	85	---	---	---	---	---	---
Sweden	1,655	4,405	---	---	552	---	---	---	---	---	---	---	---	---	---	---	---
Switzerland	2,032	---	---	---	---	---	329	1,176	716	2,550	3,462	5,394	1,907	860	2,193	---	457
United Kingdom	2,586	30	---	---	---	---	---	---	575	1,423	4,632	23,662	26,598	---	5,020	---	---
Total 2/	116,452	66,503	10,704	13,905	64,923	37,811	16,054	51,834	33,177	79,975	114,081	110,517	92,084	85,380	74,639	94,070	116,747
Japan	---	---	---	---	551	---	---	983	---	---	---	---	9	54	---	98	---
Grand Total 2/	145,030	75,721	11,472	14,394	66,848	38,854	16,452	53,705	33,338	80,279	115,384	110,618	92,170	85,498	75,285	94,275	116,829

1/ Preliminary. 2/ Includes other countries not shown separately above. SOURCE: Compiled from reports of the Bureau of the Census.



the use of synthetic resins (which may or may not be processed from fats and oils) increased from 1 pound to nearly 2 pounds per gallon of coatings produced. This trend mainly reflected technological changes which resulted in a shift from drying-oil types of vehicles in paint and varnish formulations to synthetic resins, some of which (alkyds) contain semi-drying or drying oil fatty acids and others (latex emulsion types) which do not contain drying oils.

The postwar era has witnessed a growing demand for paint products better suited to the "do-it-yourself" home owner. For the most part the products contain little or no drying oil. The introduction of latex emulsion paints aided this home maintenance trend. The use of these non-oil paints has expanded because of ease of application and cleanup, relative lack of odor, and effective industry promotion. The loss of oil markets in floor coverings and oilcloth mainly reflects the shift toward adhered tiles and plastic sheet products. Also, the development of resin-type foundry core binders has adversely affected linseed oil consumption.

West Europe Leading Market for Oil Exports

U.S. exports of linseed oil have varied from 318 million pounds in 1954 (mostly from CCC stocks) to only 2 million in 1961. Western Europe is our major market, usually accounting for 80 to 90% of the total (table 26). U.S. exports averaged approximately 100 million pounds annually during the 1950's and 50 million in the 1960's. Most years the export movement was with government assistance.

Exports are expected to increase sharply during the 1972/73 marketing year as activity picks up under the CCC export sale program to non-EC countries—possibly totaling 200-300 million pounds compared with 66 million in 1971/72. World supplies of flaxseed this year are off sharply and the smallest since 1956.

Linseed Meal Strong

In sharp contrast to oil, the demand for linseed meal has been strong. The feed market is expanding, and there have been no major linseed meal disposal problems.

Linseed meal is used as a high-protein ingredient for animal feeds. Chief competitors in the feed industry are soybean meal, cottonseed meal, copra meal, corn oil meal, fish meal, meat scraps, and urea.

Production of linseed meal dropped from 770,000 tons in 1950 to 385,000 last season (table 28). Because flaxseed contains a high proportion of oil, meal is considered a byproduct of the crushing operation. So with the decline in linseed oil demand, meal output has declined. The average annual rate of decline in linseed meal production and use during 1950-71 was 18,000 tons or about 2% per year. Domestic feeding of linseed meal in 1971 was only a third as much as in 1950. Exports have averaged close to 100,000 tons in recent years, virtually all to Western Europe (table 29).

Linseed meal prices (34% protein, Minneapolis) have generally trended upward over the past 2 decades—from $59 per ton in 1950 to $68 in 1971. The demand for linseed meal is very strong this season (as well as for other protein meals) with prices averaging $83 per ton during July-September, a fourth above a year ago.

Future Prospects

Flaxseed's economic survival as an important U.S. oilseed crop is threatened with the decline in production and substantial loss of markets. Its long-term competitive position with other crops for farm resources will depend on flaxseed's ability to compete for acreage in Minnesota and the Dakotas. Further improvements in culture, varieties, insect and disease control are required to boost yields per acre. If yields fail to increase significantly, flaxseed will continue to lose ground in the tri-State area where it is most competitive.

The downtrend in U.S. linseed oil usage was arrested last season as consuming industries took advantage of the plentiful supplies and lowest price in 4 decades. If linseed oil prices remain competitive, the industry probably could maintain a domestic market of around 300 million pounds—the equivalent of 15 million bushels of seed. The relatively recent development of water emulsion linseed oil paints and an "anti-spalling" linseed oil compound for protecting the surface of concrete highways could give a boost to domestic use. These products are the result of research carried on jointly by linseed oil processors and the USDA.

It seems clear that in future years linseed meal prices will remain strong relatively to linseed oil, and the value of the 2 products from a bushel of flaxseed probably will be more equally divided than in the past. The demand for linseed meal, as well as other high-protein feeds, will continue strong. This will help keep linseed oil prices competitive and enhances its opportunities in coatings and other industrial products.

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U.S. Fats and Oils Statistical Bulletin Available

A free copy of USDA's Statistical Bulletin No. 489, U.S. Fats and Oils Statistics, 1950-71, issued July 1972, may be obtained by writing to Division of Information, Office of Management Services, U.S. Department of Agriculture, Washington, D.C. 20250. The bulletin incorporates a comprehensive series of longterm statistics on oilseeds, fats, oils and their products, and complements the salient statistics appearing regularly in the *Fats and Oils Situation*, issued 5 times a year by the Economic Research Service.

The publication consists of 284 tables on supply, disposition, utilization, foreign trade, and prices of oilseeds and products. It supersedes Statistical Bulletin No. 376, *U.S. Fats and Oils Statistics, 1909-65*, published in August 1966. Some new series are included, such as those dealing with end uses of fats and oils in salad and cooking oils, salad dressings, mayonnaise and related consumer products. Also, a glossary of terms used by the fats and oils trade has been added.

OUTLOOK CONFERENCE SCHEDULED FOR FEB. 20-22, 1973

The 1973 National Agricultural Outlook Conference has been set for Feb. 20 through 22, at the U.S. Department of Agriculture in Washington, D.C.

Central theme of the Conference will be "The Future Structure of Agricultural Production and Marketing." Such topics as the long-range expansion of demand for agricultural products, input requirements of the food industry, significant trends in organization and control of the food and fiber sector of the economy, impact of environmentaldevelopments on agricultural production and marketing, and future developments in the export market will be explored in depth.

The 1973 outlook for U.S. agriculture and the general economy will receive particular attention at the Conference. Sessions on the 1973 outlook for major commodities and rural family living will make up an important part of the Conference as usual. The Conference, sponsored by USDA's Economic Research Service and Extension Service, will feature presentations and panel discussions by leading authorities in agriculture and business.

Table 30.--Domestic disappearance of food and nonfood fats and oils, by end products, total and per person, year beginning October by quarters, with comparisons, 1969 to date

Year and Quarter	Unit	Food							Nonfood				All products (fat content)
		Butter (actual weight)	Margarine (actual weight)	Lard (direct)	Baking and frying fats (shortening)	Salad and cooking oils	Other edible 1/	Total (fat content)	Soap 2/	Drying oils 3/	Other 4/	Total	
1969-70													
Oct.-Dec.:													
Total	Mil. lb.	306	592	252	943	732	122	2,767	100	172	1,106	1,378	4,145
Per person	Lb.	1.5	2.9	1.2	4.6	3.6	.6	13.6	.5	.8	5.4	6.8	20.4
Jan.-Mar.:													
Total	Mil. lb.	296	583	235	923	774	138	2,779	184	150	937	1,271	4,049
Per person	Lb.	1.5	2.9	1.2	4.5	3.8	.7	13.6	.9	.7	4.6	6.2	19.8
Apr.-June:													
Total	Mil. lb.	246	496	251	842	791	144	2,624	193	161	976	1,330	3,953
Per person	Lb.	1.2	2.4	1.2	4.1	3.9	.7	12.8	.9	.8	4.8	6.5	19.3
July-Sept.:													
Total	Mil. lb.	257	538	188	885	766	127	2,603	187	182	1,025	1,394	3,997
Per person	Lb.	1.3	2.6	.9	4.3	3.7	.6	12.7	.9	.9	5.0	6.8	19.5
Season:													
Total	Mil. lb.	1,106	2,209	927	3,593	3,063	532	10,773	664	664	4,044	5,373	16,145
Per person	Lb.	5.4	10.8	4.5	17.6	15.0	2.6	52.8	3.3	3.3	19.8	26.3	79.1
1970-71 5/													
Oct.-Dec.:													
Total	Mil. lb.	306	607	265	907	822	131	2,862	123	134	1,084	1,342	4,204
Per person	Lb.	1.5	3.0	1.3	4.4	4.0	.6	13.9	.6	.7	5.3	6.5	20.4
Jan.-Mar.:													
Total	Mil. lb.	273	581	245	891	773	124	2,718	195	143	889	1,228	3,946
Per person	Lb.	1.3	2.8	1.2	4.3	3.7	.6	13.2	.9	.7	4.3	6.0	19.1
Apr.-June:													
Total	Mil. lb.	257	536	197	829	825	123	2,608	205	151	1,007	1,363	3,971
Per person	Lb.	1.3	2.6	1.0	4.0	4.0	.6	12.6	1.0	.7	4.9	6.6	19.2
July-Sept.:													
Total	Mil. lb.	239	526	240	887	812	107	2,659	179	202	985	1,366	4,025
Per person	Lb.	1.2	2.5	1.2	4.3	3.9	.5	12.8	.9	1.0	4.8	6.6	19.4
Season:													
Total	Mil. lb.	1,075	2,250	949	3,514	3,232	485	10,849	703	631	3,965	5,299	16,148
Per person	Lb.	5.2	10.9	4.6	17.0	15.6	2.3	52.5	3.4	3.1	19.2	25.6	78.2
1971-72 5/													
Oct.-Dec.:													
Total	Mil. lb.	299	622	197	882	831	125	2,775	104	129	1,103	1,336	4,112
Per person	Lb.	1.4	3.0	.9	4.2	4.0	.6	13.4	.5	.6	5.3	6.4	19.8
Jan.-Mar.:													
Total	Mil. lb.	255	587	202	859	872	130	2,738	203	206	979	1,388	4,127
Per person	Lb.	1.2	2.8	1.0	4.1	4.2	.6	13.1	1.0	1.0	4.7	6.7	19.8
Apr.-June:													
Total	Mil. lb.	250	553	178	843	886	165	2,714	220	194	1,015	1,430	4,144
Per person	Lb.	1.2	2.7	.9	4.0	4.2	.8	13.0	1.1	.9	4.9	6.9	19.9
July-Sept.:													
Total	Mil. lb.												
Per person	Lb.												
Season:													
Total	Mil. lb.												
Per person	Lb.												

1/ Includes all food fats and oils used other than butter, lard, margarine, shortening and cooking and salad oils.

2/ Fat equivalent of soap used in synthetic rubber is included in "other industrial products". Adjusted for foreign trade and changes in stocks.

3/ Paints, varnishes, floor coverings, oilcloth, printing inks, core oils, synthetic resins, insulation, linings, packings, coated fabrics, caulking and other protective coatings.

4/ Includes use of fats and oils in chemicals, lubricants and greases, animal feeds, fatty acids, tin and terne plate, pharmaceuticals, leather, candles, synthetic organic detergents, toilet articles, and miscellaneous industrial products.

5/ Preliminary.

Table 31.--Fats and oils (including their products) and oilmeals: Production from domestic and imported materials, and factory and warehouse stocks at end of month

Item	Production						Stocks			
	Oct.-July		1971	1972			1971	1972		
	1970-71	1971-72	July	May	June	July	July 31	May 31	June 30	July 31
PRIMARY FATS AND OILS	Million pounds									
Food fats and oils										
Butter (creamery)	997.6	937.0	89.4	119.4	111.1	89.4	251.2	159.1	194.8	211.4
Lard (commercial)	1,712.0	1,406.6	142.0	146.1	137.0	107.0	89.1	89.6	83.2	64.3
Beef fats	465.0	434.9	40.3	43.6	44.8	41.6	49.9	43.7	44.1	43.0
Total edible animal fats	3,174.6	2,828.5	271.7	309.1	292.9	238.0	390.2	292.4	322.1	318.7
Corn oil	403.3	412.4	42.4	46.1	45.7	43.3	65.6	81.4	81.1	89.5
Cottonseed oil	1,153.8	1,193.3	43.5	97.7	75.8	54.4	167.2	266.0	239.7	205.0
Palm oil	---	---	---	---	---	---	51.2	76.6	92.1	115.8
Peanut oil	241.3	235.5	20.4	24.0	19.7	16.6	41.8	32.0	29.5	32.1
Soybean oil	6,975.0	6,664.8	674.9	698.8	635.4	648.6	745.3	945.0	829.7	860.1
Safflower oil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	7.8	21.7	17.9	18.7
Total edible vegetable oils	8,773.4	8,506.0	781.2	866.6	776.6	762.9	1,078.9	1,422.7	1,290.0	1,321.2
Soap fats and oils										
Tallow, inedible, and greases	4,142.8	4,034.7	393.5	409.2	414.2	360.9	441.5	350.5	355.4	344.5
Fish and marine oil 1/	179.1	121.8	55.3	31.3	26.1	32.5	148.1	53.5	53.2	52.8
Coconut oil	D	D	D	D	D	D	147.4	170.2	168.5	157.7
Total soap fats	4,321.9	4,156.5	448.8	440.5	440.3	393.4	737.0	574.2	577.1	555.0
Drying oils										
Castor oil 1/	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	93.3	57.8	45.9	45.5
Linseed oil	324.9	363.2	25.9	33.2	39.0	33.2	193.2	275.3	276.6	263.1
Tall oil	1,082.8	1,098.6	96.5	113.4	111.1	98.8	172.0	184.1	173.5	169.5
Tung oil	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	48.0	42.1	41.1	37.8
Total drying oils	1,407.7	1,461.8	122.4	146.6	150.1	132.0	506.5	559.3	537.1	515.9
Grand total	17,677.7	16,952.9	1,624.1	1,762.8	1,659.9	1,526.2	2,712.6	2,848.6	2,726.3	2,710.8
From domestic materials	17,677.7	16,952.9	1,624.1	1,762.8	1,659.9	1,526.2				
From imported materials	D	D	D	D	D	D				
FAT-AND-OIL PRODUCTS										
Cooking and salad oils										
Total	2,915.4	3,158.2	290.5	359.9	355.0	307.8	71.4	106.1	99.6	93.3
Soybean	2,132.4	2,454.0	225.6	287.7	275.1	238.6	53.5	82.9	81.9	75.5
Other	783.0	704.1	64.9	72.3	80.0	69.2	17.9	23.3	17.8	17.8
Baking and frying fats (shortening)										
Total	2,923.2	2,889.6	261.5	291.4	290.5	261.9	111.0	130.6	137.7	120.7
100% vegetable oil	1,942.0	1,943.5	176.9	198.7	199.5	177.5	82.1	104.8	112.1	95.6
100% animal fats or blends of vegetable oil and animal fats	981.2	946.1	84.7	92.7	91.0	84.4	28.9	25.8	25.6	25.0
Margarine										
Total	1,909.2	1,940.7	163.4	186.3	186.1	165.3	72.9	83.9	67.1	68.4
Soft	385.1	427.9	33.3	43.3	42.8	35.3	---	---	---	---
1 pound units	1,685.7	1,685.9	142.4	163.2	160.7	141.2	---	---	---	---
All other	223.5	254.7	21.1	23.1	25.3	24.1	---	---	---	---
Fatty Acids	908.7	928.9	73.6	95.3	99.6	82.8	125.9	108.4	106.0	106.6
Glycerine (Natural and synthetic)	274.3	286.1	26.1	33.5	29.9	28.9	37.6	52.5	48.8	48.7
Meat Meal and Tankage	3,385.1	3,131.9	317.1	304.8	313.8	281.1	---	---	---	---
OILSEED CAKE AND MEAL	Thousand tons									
Soybean (including hull meal)	15,210.8	14,402.5	1,474.3	1,488.6	1,353.1	1,383.7	215.0	186.7	189.1	243.2
Cottonseed	1,645.5	1,676.9	61.1	132.4	101.8	76.6	109.5	159.4	137.5	102.6
Linseed	291.6	330.1	23.1	29.2	36.3	30.3	6.9	9.5	D	6.2
Peanut	161.1	151.4	13.0	15.3	12.3	10.0	10.8	3.0	2.2	1.5
Copra	23.9	D	D	D	D	D	D	D	D	D
Other	10.3	19.8	D	D	D	D	5.4	15.6	9.0	12.9
Total oilmeals	17,343.2	16,580.7	1,571.5	1,665.5	1,503.5	1,500.6	347.6	374.2	337.8	366.4

1/ Stocks include GSA stockpile.
N.A.--Not available.
D--Census disclosure.
SOURCE: Bureau of Census, except butter.

Table 32.--Imports and exports of fats, oils, oil-bearing materials, fat-and-oil products (in terms of oil) and oilmeals

Item	Imports for consumption					Exports 1/				
	Oct.-July		1972			Oct.-July		1972		
	1970-71	1971-72	May	June	July	1970-71	1971-72	May	June	July
	Million pounds									
Food fats and oils										
Butter	2.1	1.9	2/	.1	2/	13.2	116.5	.7	.1	.1
Lard	2/	.4	---	.1	.1	294.1	150.9	11.6	12.6	12.7
Beef fats	.1	.1	---	2/	---	7.7	8.9	.4	.5	1.0
Total, edible animal fats	2.2	2.4	2/	.2	.1	315.0	276.3	12.7	13.2	13.8
Corn oil	.6	---	---	---	---	12.8	18.5	2.4	1.7	3.5
Cottonseed oil	2/	---	---	---	---	330.9	380.9	30.6	50.0	33.5
Cottonseed (17 percent)	---	---	---	---	---	12.2	1.0	.2	.1	2/
Olive oil, edible	54.5	56.9	8.5	8.3	7.1	---	---	---	---	---
Palm oil	179.3	384.5	24.7	58.3	84.6	---	---	---	---	---
Peanut oil	2/	2/	2/	2/	---	43.7	58.4	5.9	5.3	.1
Peanuts, shelled (43.5 percent)	---	---	---	---	---	49.9	115.8	19.1	10.2	8.8
Soybean oil	---	2/	---	---	---	1,513.1	1,241.0	94.8	267.5	110.6
Soybeans (18.3 percent)	2/	2/	---	2/	2/	4,097.6	3,989.5	349.2	341.8	289.1
Safflower seed (36 percent)	---	---	---	---	---	23.1	41.8	---	2.4	---
Other vegetable oils	21.0	19.8	1.5	2.3	1.9	7.9	11.5	2.1	.6	.2
Total, edible vegetable oils	255.4	461.2	34.7	68.9	93.6	6,091.2	5,858.4	504.3	679.6	445.8
Soap fats and oils										
Tallow, inedible	6.6	1.5	.1	.1	.2	1,962.2	1,920.3	217.8	168.9	191.1
Greases	2/	2/	2/	---	---	165.1	147.0	11.3	13.5	15.5
Fish and fish liver oils non-medicinal	.5	2.4	.1	.4	.7	123.0	130.6	5.3	11.0	38.3
Marine mammal oils	49.5	17.4	---	---	---	---	---	---	---	---
Olive oil, inedible	.2	.3	2/	2/	2/	---	---	---	---	---
Total, slow-lathering oils	56.8	21.6	.2	.5	.9	2,250.3	2,197.9	234.4	193.4	244.9
Babassu oil	---	---	---	---	---	---	---	---	---	---
Coconut oil	496.4	555.7	70.4	58.2	53.1	13.4	18.2	.4	.2	.1
Copra (64 percent)	224.9	288.3	33.0	53.0	12.2	---	---	---	---	---
Palm kernel oil	84.7	74.8	7.5	3.5	6.1	---	---	---	---	---
Total, lauric-acid oils	806.0	918.8	110.9	114.7	71.4	13.4	18.2	.4	.2	.1
Drying oils										
Flaxseed (36.1 percent)	2/	2/	---	---	---	41.9	59.4	6.1	22.3	21.0
Linseed oil	2/	2/	2/	---	---	53.0	80.6	15.6	11.4	28.4
Oiticica oil	2.7	4.3	.4	---	1.4	---	---	---	---	---
Tall oil	---	---	---	---	---	120.4	139.7	6.9	28.8	8.2
Tung oil	22.5	15.2	.3	1.5	.4	1.5	1.3	.2	.1	2/
Total	25.2	19.5	.7	1.5	1.8	216.8	281.0	28.8	62.6	57.6
Other industrial oils and fats										
Castor oil	71.6	62.6	6.9	2.9	4.5	---	---	---	---	---
Fish-liver oils, medicinal	10.8	7.2	1.1	.8	.5	---	---	---	---	---
Rapeseed oil	9.6	8.7	.4	.5	1.3	---	---	---	---	---
Wool grease	8.7	9.4	1.2	1.0	.6	---	---	---	---	---
Other vegetable oils and fats, inedible	9.2	6.3	.9	.9	.7	71.5	109.4	5.8	11.7	17.4
Total	109.9	94.2	10.5	6.1	7.6	71.5	109.4	5.8	11.7	17.4
Products										
Margarine (fat content)	---	---	---	---	---	2.2	2.4	.1	.2	.2
Shortening	---	---	---	---	---	18.4	19.6	2.9	3.1	1.7
Salad products (fat content)	---	---	---	---	---	8.3	9.3	.9	.8	.8
Soap (fat content)	1.9	2.0	.1	.2	.2	8.2	7.9	.7	.9	.9
Fatty acids	6.3	5.5	.7	.9	1.2	102.8	93.1	6.2	12.8	4.7
Total	8.2	7.5	.8	1.1	1.4	139.9	132.3	10.8	17.8	8.3
Grand total	1,263.6	1,525.3	158.0	192.9	176.9	9,098.3	8,873.4	797.2	978.6	787.8
Glycerine	---	.6	.1	---	---	56.8	58.0	2.0	9.4	4.8
Oilseed Cake and Meal:	Thousand tons									
Soybean	---	---	---	---	---	3,721.7	3,309.8	365.4	221.0	324.1
Cottonseed	---	.1	---	---	---	26.9	6.4	2/	.2	---
Linseed	1.3	2.5	.3	.2	.2	73.9	98.7	13.1	7.1	26.9
Copra	---	---	---	---	---	---	---	---	---	---
Corn	---	---	---	---	---	1.0	2.5	---	.1	2/
Other	1.7	8.1	1.0	1.2	.9	68.7	76.8	6.0	3.0	6.8
Total oilmeals	3.0	10.7	1.3	1.4	1.1	3,892.1	3,494.2	384.5	231.4	357.8

1/ Includes re-exports and foreign donations but not shipments to U.S. Territories. 2/ Less than 50,000 pounds.

SOURCE: Bureau of Census.

Table 33.--Index numbers of wholesale prices of fats and oils 1/

Item	1967=100				
	July		1972		
	1970	1971	May	June	July
All fats and oils	117	122	111	110	108
All fats and oils, except butter	125	134	117	116	112
Grouped by origin:					
Animal fats	122	119	114	113	112
Vegetable oils, domestic	112	134	111	111	106
Vegetable oils, foreign	128	107	87	86	88
Grouped by use:					
Butter	104	102	101	101	101
Lard	139	144	133	131	128
Lard, refined	120	118	113	113	113
Food fats other than butter	122	139	119	118	114
Food fats other than butter and lard	117	137	114	113	109
All edible fats and oils	113	120	110	109	107
Soap fats	135	132	116	116	113
Drying oils	98	98	92	95	97
Other industrial	129	123	104	101	115
All industrial	130	126	113	113	110
Edible vegetable oils, grouped by degree of processing:					
Crude	115	137	113	112	107
Refined	112	136	120	119	116
End products	111	123	121	122	121
Margarine	112	120	122	122	122
Shortening, 3 lb. tin	111	124	122	122	122
Shortening, 440 lb. drum	107	123	118	118	118

1/ The year 1967 has been established as the new standard reference base period for general purpose index numbers prepared by Federal agencies. Index numbers based on 1967=100 were converted from the indexes based on 1957-59=100 previously published in this report.

Table 34.--Prices received by farmers and prices at terminal markets for specified oil-bearing materials and oilmeals

Item	Unit	August		1972		
		1970	1971	June	July	August
		-- Dollars --				
OILSEEDS						
Copra, Philippines, c.i.f. Pacific Coast	Short ton	---	---	---	---	---
Cottonseed, United States average	Short ton	50.00	60.00	---	---	45.00
Flaxseed, No. 1, Minneapolis	Bushel	2.65	2.62	2.80	2.79	2.85
Flaxseed, United States average	Bushel	2.46	2.34	2.50	2.49	2.55
Peanuts, United States average (farmers' stock)	100 lb.	12.20	12.90	---	---	13.00
Peanuts, Virginias' No. 1, shelled, Va.-N.C. 1/	100 lb.	21.38	22.25	25.12	25.00	23.88
Peanuts, Runners No. 1, shelled, Southeast 1/	100 lb.	22.00	22.50	24.75	24.38	23.25
Peanuts, Spanish No. 1, shelled, Southeast 1/	100 lb.	22.12	22.38	24.75	24.00	23.12
Peanuts, Spanish No. 1, shelled, Southwest 1/	100 lb.	22.00	22.88	24.62	23.75	23.25
Soybeans, No. 1, Yellow, Chicago	Bushel	2.79	3.29	3.47	3.51	3.56
Soybeans, No. 1, Yellow, Illinois country shipping points	Bushel	2.75	3.23	3.44	3.48	3.45
Soybeans, United States average	Bushel	2.65	3.09	3.32	3.34	3.36
OILMEALS (bulk)						
Copra meal, 20 percent protein, Los Angeles	Short ton	80.00	---	80.00	80.00	80.00
Cottonseed meal, 41 percent protein, Memphis	Short ton	82.00	78.00	70.30	81.40	86.60
Cottonseed meal, 41 percent protein, Chicago	Short ton	92.60	89.40	82.80	93.80	97.70
Cottonseed meal, 41 percent protein, Atlanta	Short ton	85.40	78.10	77.40	87.20	94.50
Cottonseed meal, 41 percent protein, Ft. Worth	Short ton	85.00	79.90	81.30	84.80	87.40
Fish meal, 60 percent protein, bulk, New York 2/	Short ton	174.50	161.00	180.00	182.25	193.40
Fish meal, 60 percent protein, bulk, Los Angeles 3/	Short ton	170.25	135.00	147.75	155.25	171.00
Linseed meal, 34 percent protein, Minneapolis	Short ton	62.75	66.00	75.00	80.50	84.70
Linseed meal, 34 percent protein, New York	Short ton	84.75	---	---	---	---
Peanut meal, 50 percent protein, f.o.b. Southeastern mills	Short ton	90.75	75.60	97.50	102.00	---
Safflower meal, 20 percent solvent, San Francisco	Short ton	41.75	38.20	36.00	36.00	36.00
Soybean meal, 44 percent protein, Chicago	Short ton	89.20	84.75	101.20	107.50	107.10
Soybean meal, 44 percent protein, Decatur	Short ton	84.00	78.75	95.00	101.40	101.00
Soybean meal, 44 percent protein, Atlanta	Short ton	92.20	87.10	104.80	110.00	109.50
Soybean meal, 44 percent protein, Memphis	Short ton	85.40	80.60	98.30	104.60	105.90
Soybean meal, 50 percent protein, Decatur 4/	Short ton	92.50	84.20	104.90	111.60	111.00
Soybean meal, 50 percent protein, Memphis 4/	Short ton	97.40	89.10	109.80	116.00	116.80
Soybean meal, 50 percent protein, Atlanta 4/	Short ton	102.00	95.50	114.40	119.90	119.80

1/ This price applies to peanuts for edible uses. 2/ Beginning July 1971, quoted as 65% protein, East Coast. 3/ Beginning January 1972, quoted as 65% protein. 4/ 49 to 50 percent protein. N.A.--Not available.

Compiled from Chemical Marketing Reporter (formerly OPD Reporter), Wall Street Journal, Chicago edition, reports of the Statistical Reporting Service, and the Consumer Marketing Service.

Table 35.--Wholesale and retail prices per pound for fats and oils

Item	August		1972		
	1970	1971	June	July	August
			-- Cents --		
Wholesale Prices					
Butter, creamery, Grade A, (92-score) bulk, New York	70.9	68.8	68.8	68.8	70.4
Butter, creamery, Grade A, (92-score) bulk, Chicago	69.8	67.8	67.7	67.8	69.5
Butter, creamery, Grade A, (92-score) prints, San Francisco	85.3	83.8	83.3	83.3	85.5
Castor oil, dehydrated, tanks, New York	28.0	29.0	31.5	31.5	31.5
Castor oil, No. 1, Brazilian, tanks, imported, New York	15.5	17.0	20.8	25.5	26.0
Coconut oil, crude, tank cars, Pacific Coast, 1/	15.9	14.2	9.7	9.4	9.3
Coconut oil, crude, tanks, f.o.b. New York	16.9	15.1	10.7	10.4	10.3
Coconut oil, refined, tanks, l.c.l., New York	18.2	16.6	12.3	12.1	13.5
Cod oil, spot, drums, New York	8.2	---	11.8	11.7	11.5
Codliver oil, medicinal, U.S.P., barrels, New York	20.8	22.8	22.8	22.8	22.8
Corn oil, crude, tank cars, f.o.b. Midwest mills	15.5	18.9	16.3	15.0	14.5
Corn oil, crude, tanks, New York	15.6	N.A.	N.A.	N.A.	N.A.
Corn oil, refined, tanks, New York	18.7	22.5	18.6	17.9	18.0
Cottonseed oil, crude, tank cars, f.o.b., S.E. mills	14.1	16.5	12.4	11.9	11.4
Cottonseed oil, crude, tank cars, f.o.b., Valley	13.6	16.5	11.9	11.3	11.1
Cottonseed oil, crude, tank cars, f.o.b., Texas	13.5	16.0	11.8	11.0	10.9
Cottonseed oil, refined, tanks, New York	17.6	20.9	16.3	15.8	15.4
Degras, Lanolin technical, drums, New York	33.0	47.0	53.0	53.0	53.0
Glycerine, synthetic, refined, 99.5%, tanks, delivered, New York	22.0	23.0	23.0	23.0	23.0
Glycerine, natural, refined, USP. 99%, tanks, delivered, New York	20.6	22.6	22.6	22.6	22.6
Grease, A white, tank cars, delivered Chicago	8.6	7.6	6.8	6.5	7.4
Grease, B white, delivered, Chicago	7.8	6.7	6.2	6.3	6.4
Grease, yellow, delivered, Chicago	8.1	6.4	6.3	6.0	6.4
Grease, white, choice, tanks, New York	8.5	7.6	6.8	6.9	6.9
Grease oil, extra No. 1, drums, Chicago 2/	13.4	15.2	15.2	15.2	15.2
Lard, loose, tank cars, Chicago	11.5	12.0	10.3	10.0	10.0
Lard, prime steam, tierces, Chicago	12.0	11.4	10.0	9.9	10.1
Lard, refined, one and two pound prints, Chicago	17.0	16.8	15.4	15.4	15.7
Lard, refined, carlots, 50-lb. tins, Chicago	14.5	N.A.	N.A.	N.A.	N.A.
Linseed oil, raw, tank cars, Minneapolis	11.0	8.8	9.5	9.5	9.5
Linseed oil, raw, tanks, New York	12.3	10.2	11.0	11.0	11.0
Margarine, colored, delivered, Eastern U.S.	29.0	31.2	31.3	31.3	31.3
Margarine, yellow, quarters, f.o.b., Chicago	20.8	24.2	23.8	23.0	22.2
Margarine, white, domestic vegetable, Chicago	19.5	23.0	22.5	21.8	21.2
Menhaden oil, crude, tanks, f.o.b., Baltimore	N.A.	9.0	7.0	7.0	7.0
Menhaden oil, light pressed, tanks, New York	10.5	10.5	10.2	10.2	10.2
Oiticica oil, drums, f.o.b., New York	18.0	18.5	16.5	16.5	16.5
Oiticica oil, tanks, New York	16.0	16.5	14.5	14.5	14.5
Olive oil, imported, edible, drums, New York	40.7	42.7	42.7	42.7	42.7
Palm oil, clarified, drums, f.o.b., New York	17.2	14.6	15.0	15.0	15.0
Palm oil, tankwagons, f.o.b., New York	14.0	13.8	10.0	9.9	9.8
Peanut oil, crude, tank cars, f.o.b. S.E. mills	16.0	18.5	17.2	17.8	16.4
Peanut oil, refined, tanks, New York	18.9	21.8	20.6	20.9	19.9
Rapeseed oil, refined (denatured), tanks, New York	17.0	17.5	17.5	17.5	17.5
Safflower oil, tanks, New York	16.5	18.4	18.4	18.7	19.6
Safflower oil, edible, drums, New York	27.0	27.0	27.0	29.5	37.0
Sesame oil, refined, drums, New York	39.0	39.0	39.0	39.0	39.0
Shortening, all vegetable, hydrogenated, 440-lb. drums, New York	23.2	25.5	24.5	24.4	24.9
Shortening, all vegetable, hydrogenated, 3 lb. tins, delivered, Eastern U.S.	29.6	33.0	32.0	32.0	31.6
Soybean oil, crude tank cars, f.o.b., Decatur	11.6	14.5	10.7	10.3	10.1
Soybean oil, refined, tanks, New York	13.5	16.0	12.3	11.7	11.4
Soybean oil, clarified, tanks, New York	13.6	17.8	17.8	17.8	17.8
Sperm oil, natural 45°, drums, New York	23.0	28.0	28.0	28.0	28.0
Sperm oil, bleached, winter 45°, drums, New York	24.0	29.0	29.0	29.0	29.0
Tall oil, crude, tanks, works	3.5	3.8	3.8	3.8	3.8
Tall oil, refined, tanks, works	8.5	8.5	8.5	8.5	8.5
Tallow, edible, loose, Chicago	12.3	11.8	10.2	10.1	9.8
Tallow, inedible, packers' prime, c.a.f. delivered, Chicago	8.2	7.3	6.4	6.6	6.9
Tallow, inedible, bleachable fancy, delivered, Chicago	8.7	7.9	6.8	7.1	7.4
Tallow, No. 1, inedible, delivered, Chicago	7.4	6.5	6.1	6.1	6.3
Tallow, special, inedible, tanks, delivered, New York	8.0	6.8	6.0	6.1	6.2
Tung oil, imported, drums, f.o.b., New York	26.0	16.1	15.5	15.5	15.5
Tung oil, imported, tanks, New York	22.5	13.1	11.0	11.0	10.5
Tung oil, domestic, tanks, f.o.b. mills	3/24.0	N.A.	N.A.	N.A.	N.A.
Retail prices 4/					
Butter	87.0	87.5	86.7	86.6	86.5
Margarine	30.1	32.8	33.3	33.0	33.0
Shortening	30.0	32.5	32.3	32.2	32.2
Salad Dressing (Italian)	76.8	81.6	81.0	81.2	81.0
Peanut Butter	63.9	66.1	67.4	67.0	67.2
Cooking and Salad oils	38.6	42.8	43.0	42.4	42.4

1/ Includes 1 cent import duty.
2/ Beginning June 1971, quoted as Lard oil, No. 1, New York.
3/ Nominal.
4/ Leading cities.
N.A.--Not available.

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FOS-264 SEPTEMBER 1972